

S M I T H S O N I A N

ZOOGOER

SUMMER 2017

FELINE FASHIONS

Style means survival
for cats great and small.

- » Animal Play: Serious Fun
- » Behavior Research
- » For Kids: Small Wonders

SUPER PUNS!

WE'RE NOT LION! We've heard some good ones @FONZNationalZoo!

f Angela Gasque Pounders

YOU THINK IM CUTE?



**AWW, GEE
OTTER HERE**

"And I can **BEARly** wait to visit the zoo again in this warm weather!"

f Dylan McDowell



CHEETAHS NEVER WIN



I'M BEARLY DRESSED

f
Do you have the koalifications?

Use #WeAreFONZ
and share your **FAVORITE
ANIMAL PUN.**



**PUNS ARE SO FUN
WHEN YOU'RE
OWL BY YOURSELF**

28

SUMMER 2017 | Vol 46, No 2

FEATURES

CLYDE NISHIMURA/NZP

Cat Couture

The fur patterns of wild cats are not only beautiful—they also serve critical functions in helping species survive.

Stalk our portfolio of feline fashion to see how.

BY PETER WINKLER

14 Playful Nature

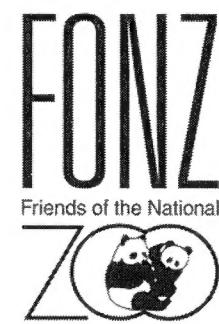
BY BRITTANY STEFF

A fishing cat plays hide-and-seek. Lemur triplets jump on plants like trampolines. Otters chase butterflies. For just about every animal, play is serious business.

22 Watchful Eyes

BY HOWARD YOUTH

A special type of volunteer patiently tracks and logs the behaviors of animals in the Zoo's collection, boosting scientists' knowledge with every entry.



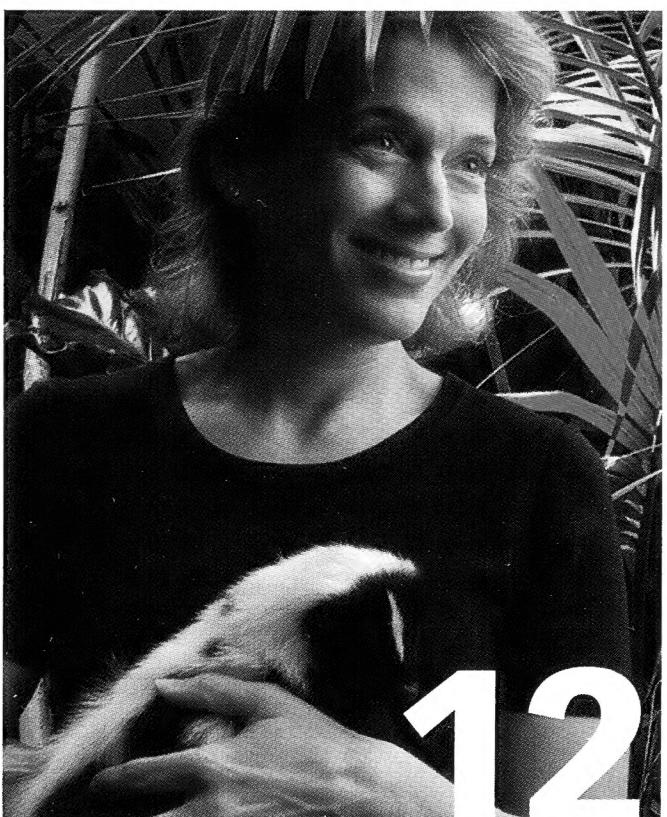
The Friends of the National Zoo helps the Smithsonian's National Zoo and Conservation Biology Institute save species by raising funds to support their mission, providing educational and fun experiences, and inspiring our members and guests.

SUMMER 2017

DEPARTMENTS

10

MELBA BROWN/NZP



12

PAMELA BAKER-MASSON/NZP

3 Zoo Voices

Zoo director Dennis Kelly discusses zoos' critical role in conservation. FONZ executive director Lynn Mento takes pride in the diverse work of our Guest Services team.

4 Zoo + You

A roundup of summer highlights at the Zoo for FONZ members.

6 Zoo News

Tiger courtship, Bei Bei weans from Mei Xiang, baby teeth for an orangutan, and more.

12 Wild Workplace

Brandie Smith always wanted to work at a zoo. Now she heads our Animal Care Sciences team.

35 Kids Corner

Big fun at the Small Mammal House, including tamarins, skunks, and the fantastic fennec fox.

40 FONZ

Classes for kids, plus a thank-you to ZooFari restaurants and wineries.

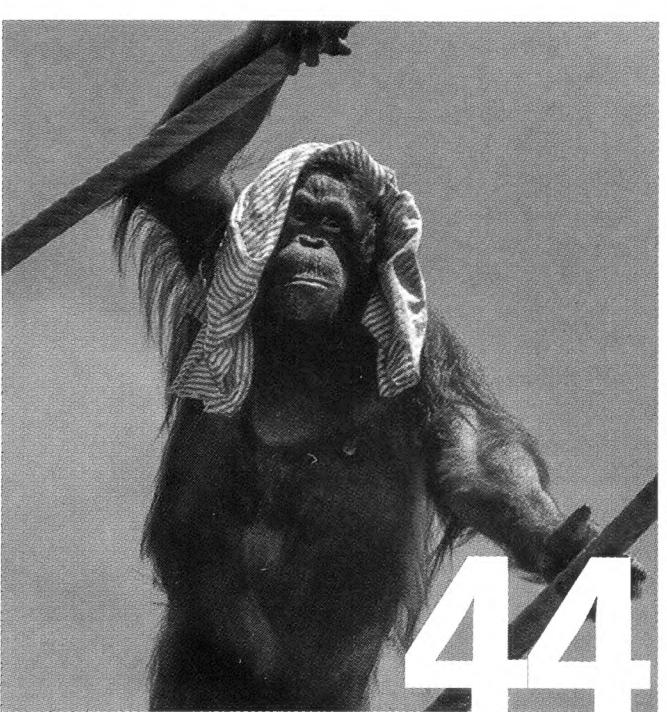
44 Zoo View

An orangutan, Batang, puts on some cooling headwear to cross the O-Line.



36

CLYDE NISHIMURA/NZP



44

ANGELA NAPIL/FONZ PHOTO CLUB

Smithsonian Zoogoer [ISSN 0163-416X] is published quarterly by Friends of the National Zoo (offices located at the Smithsonian's National Zoological Park, 3001 Connecticut Ave., N.W., Washington, D.C., 20008-2537). Periodicals postage paid at Washington, D.C. Postmaster: Send change of address to Smithsonian Zoogoer, FONZ, P.O. Box 37012, MRC 5516, Washington, D.C. 20013-7012. Copyright ©2017. All rights reserved.

 **Smithsonian National Zoological Park** is located at 3001 Connecticut Ave., N.W., Washington, D.C., 20008-2537. Weather permitting, the Zoo is open every day except December 25. For hours and other information on visiting the Zoo, go to nationalzoo.si.edu.

Membership in FONZ supports the animal care, conservation, and educational work of the Smithsonian's National Zoo. It also offers many benefits: a *Smithsonian Zoogoer* subscription, discounts on shopping and events, discounted or free parking, and invitations to special programs and activities. To join, call 202.633.2922, or visit fonz.org/join.

Membership categories

Green.....	\$55
Basic	\$60
Premier	\$80
Premier+	\$110
Patron Circle	\$250-\$499
Sponsor Circle	\$500-\$999
Benefactor Circle	\$1,000-\$2,499
Director Council	\$2,500-\$4,999
Explorer Council	\$5,000-\$9,999
Ambassador Council	\$10,000-\$24,999
National (for those outside a 200-mile radius of Washington, D.C.).....	\$50

FONZ Board of Directors

Chair: David Mork, **Vice Chair:** Pete Smith
Treasurer: Mark Rothman, **Secretary:** Carin Levine
Immediate Past Chair: Karen Silberman
David Bell, Michael Caplin, Larry Hanauer
Eric Koefoot, Barbara Lang, John Lettieri
Cindy Lewin, Laura Liswood
Scott Miller, John Mina, Brian Sands
Dennis Kelly (ex officio)

Executive Director: Lynn Mento

Smithsonian Zoogoer
Publisher: Lynn Mento
Editors: Peter Winkler and Jeff Garigliano
Design: 2farthings:design
Email: Zoogoer@si.edu

On the cover: Caracals may use their black ear tufts to draw sound inward.
PHOTO BY JESSIE COHEN/NZP



The Smithsonian's National Zoo is accredited by the Association of Zoos and Aquariums.



Recycled paper



Printed with 100% soy-based inks

Smithsonian Zoogoer is printed and sponsored by HBP



SERVICE, SMILES, AND 2.5 MILLION PEOPLE

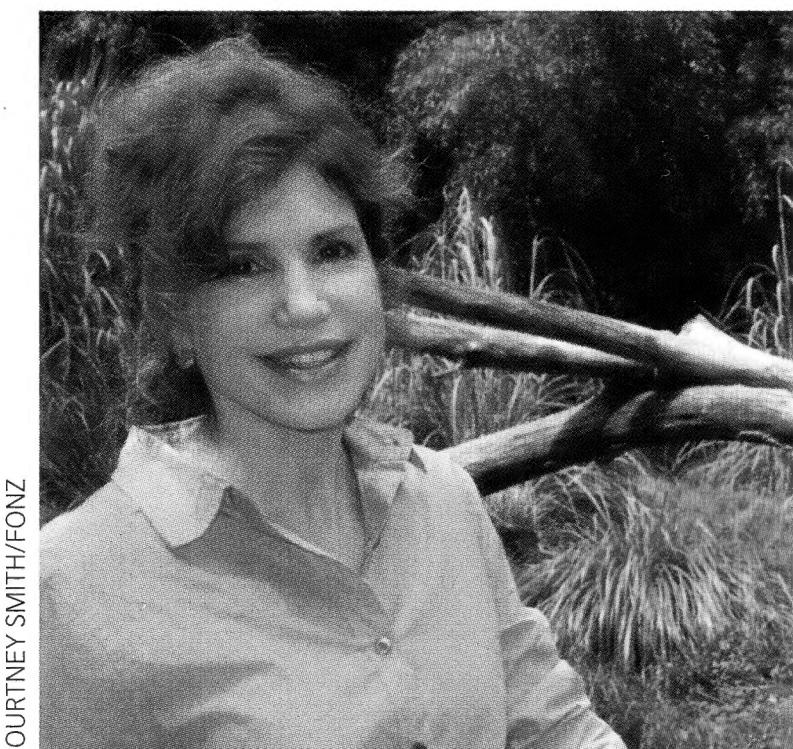
When you visit the Zoo, it's easy to see the amazing work done by the Animal Care staff each day. To learn more, see p. 12 for a Q&A with Brandie Smith, who heads the Animal Care team, and p. 38 for a profile of curator Steve Sarro. Yet it's also possible to overlook the work of another critical Zoo team: the Guest Services department. These are the people who greet you when you come in, answer questions, sell guides, rent strollers, provide wheelchairs and scooters, keep the Zoo clean, and drive the guest shuttle bus when you can't bear to walk up the hill again. (Trivia: walking from the bottom to the top of the Zoo is the equivalent of a 17-story climb. It's a great workout!)

Taking care of visitors can be a big job! After all, the Zoo draws about two and a half

million visitors in a given year. During one beautiful spring day in April, more than 30,000 people showed up. To make sure your visits are smooth, we hire up to 150 Guest Services team members during peak season. So whether it's helping a new family find the sea lions, making sure you can get around the Zoo easily, or just greeting you with a smile when you come in the Connecticut Avenue entrance, our Guest Services experts get it done and make sure everyone has a great visit.

We're always working on ways to improve the experience our members have when visiting the Zoo. So next time you're here, please let our Guest Services team know if there is a way we can make your visit more special.

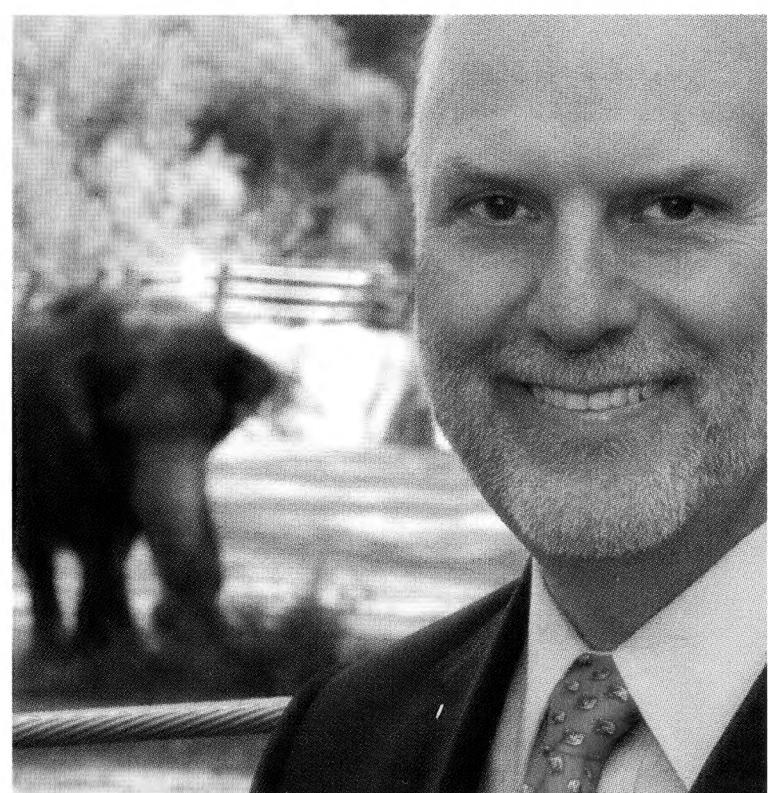
See you at the Zoo!



Lynn Mento, Executive Director
Friends of the National Zoo

COURTNEY SMITH/FONZ

A CRITICAL MISSION FOR A CHANGING PLANET



Dennis Kelly, Director
Smithsonian National
Zoological Park

By many measures, zoos and aquariums are more successful today than ever before. For all members of the Association of Zoos and Aquariums (where I currently serve as board chair), annual attendance is now roughly 186 million visitors—more than the NFL, NBA, and MLB combined.

Yet there is a growing shift in public attitudes, in which some people question the relevance of zoos. People wonder why all animals can't simply live in the wild. In a perfect world, perhaps they could. Yet in the real world, hundreds of species around the planet face real danger from poaching, habitat loss, climate change, and disease. This is not an abstract issue: Animals such as cranes, cheetahs, frogs, elephants, and many others are at risk of vanishing forever.

Given those threats, zoos and aquariums serve a critical function in helping save species. These places allow scientists to get up close to the animals to learn about their behavior, reproduction, and genetics—all of

which are key to helping save them. Scientists working in the wild simply don't have that kind of access. In addition, zoos help educate and inspire visitors to take action in their own lives to help conserve wildlife. They allow people to connect with and learn about animals through direct experiences.

And when zoos get this right, we can actually reintroduce animals that we've bred back into the wild—something that we have successfully done with species like black-footed ferrets, Przewalski's horses, and golden lion tamarins. And you'll remember our fantastic conservation victory last year when we contributed to reintroducing the scimitar-horned oryx to Chad. I encourage you to follow us on social media to keep abreast of the oryx, especially because calves have recently been born. #WeSaveSpecies

We're proud of those successes, but there is so much more to do, and the challenge is only getting tougher. In a changing world, zoos are not only relevant—they're critical.

Summer Sizzles at the Zoo

Meet the Maras

Opposite the Great Meadow lurk a trio of creatures that haven't graced the Zoo in decades: Patagonian maras. These dog-size rodents are a bit like jackrabbits, a little like kangaroos, and entirely adorable.

fonz.org/maras



JANICE SVEDA/FONZ PHOTO CLUB

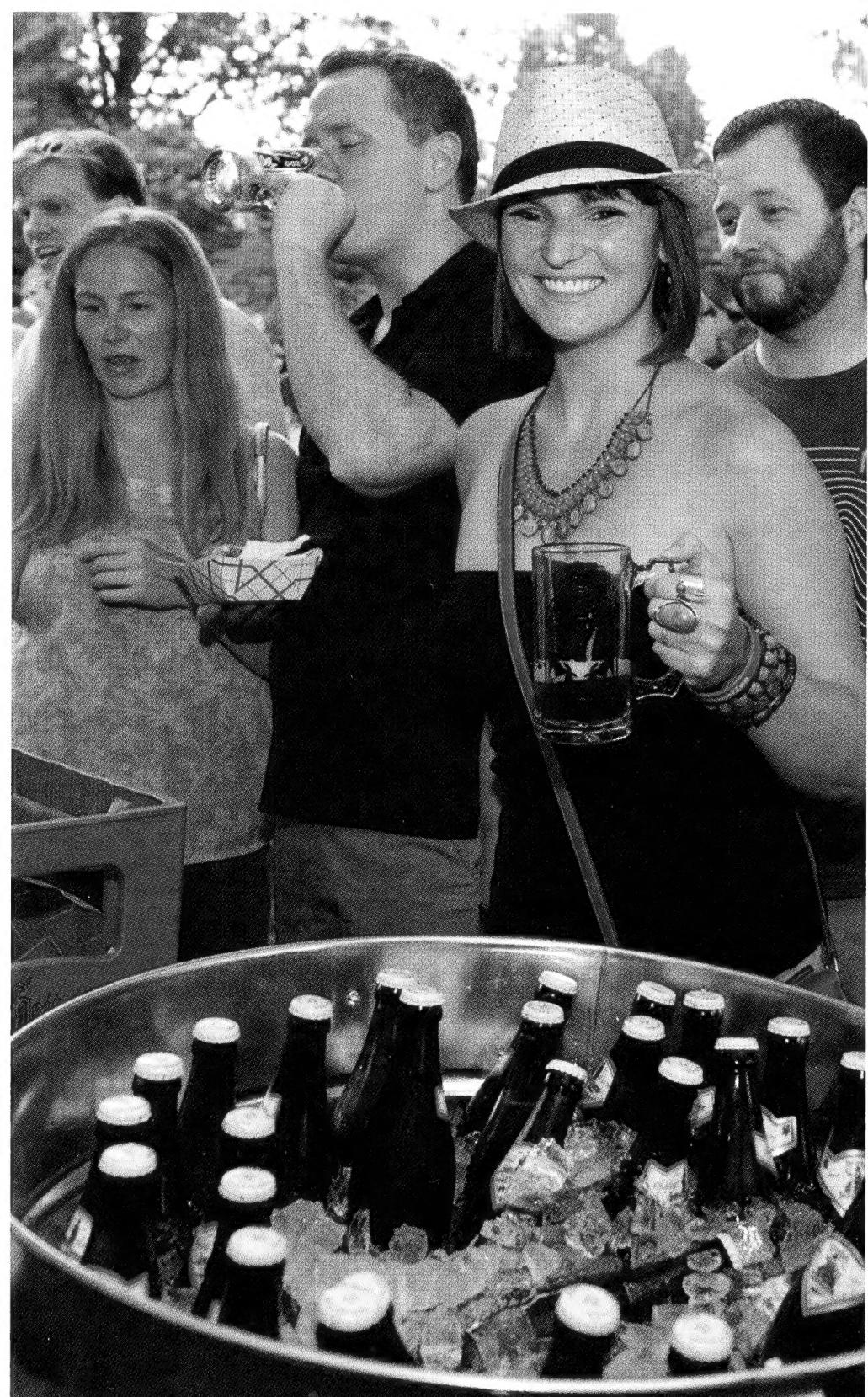


MEGAN MURPHY/NP

Brew at the Zoo | JULY 20

Saving wildlife is downright delicious at our annual beer bonanza, featuring tastings from more than 70 breweries, live music, animal encounters, games, and prizes. FONZ members enjoy special pricing and early access to ticket sales.

fonz.org/brew



JIM JENKINS/NP

Enrichment Day | SEPTEMBER 16

Join us from 10 a.m. to 2 p.m. to see how the animal care team works to keep the Zoo's residents healthy, active, and behaving naturally.

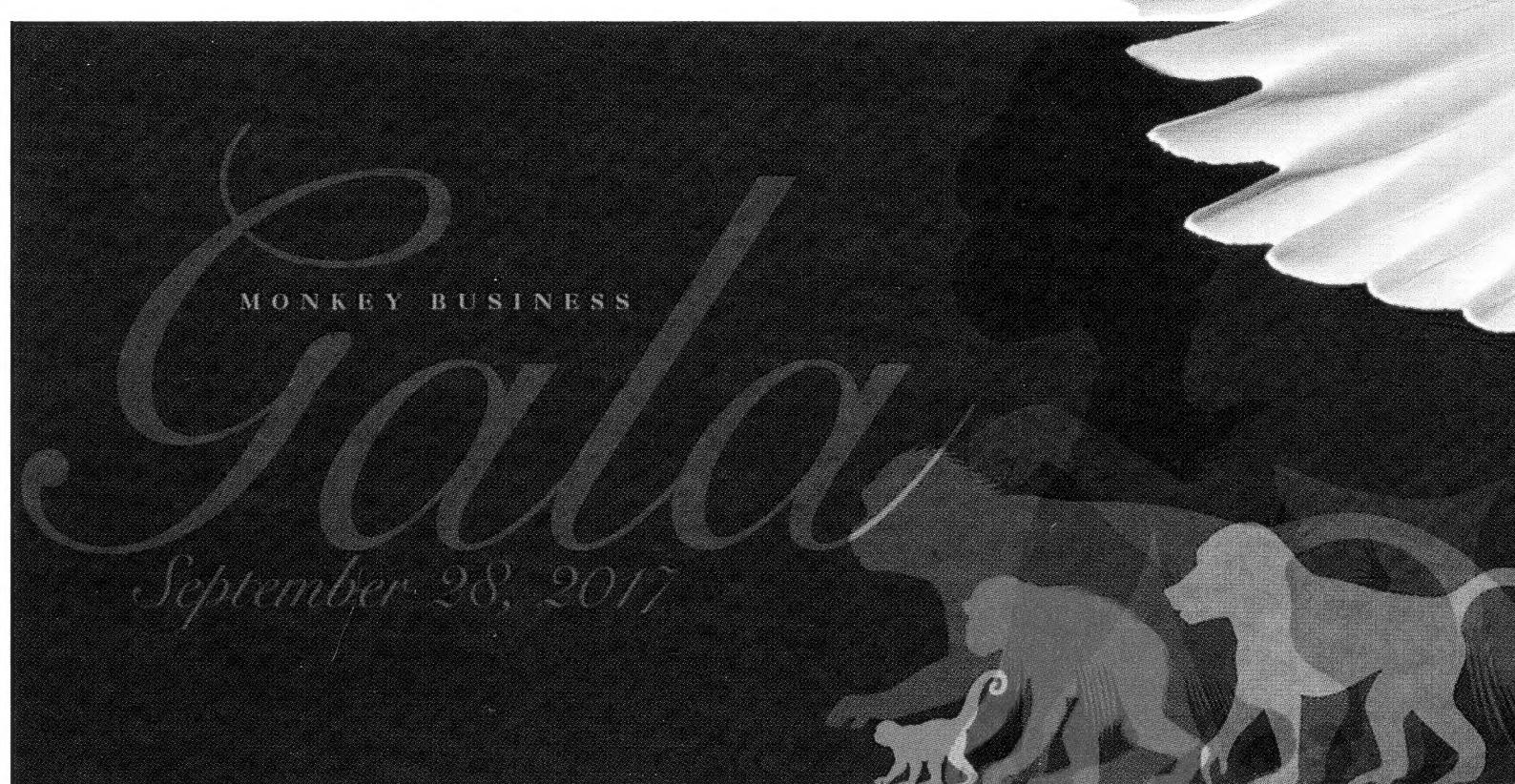
fonz.org/enrichmentday



STAN BYSHE/NZP

Monkey Business Gala | SEPTEMBER 28

The Zoo and FONZ are reinventing the idea of a gala for a good cause. Out go stiff and stuffy. In come innovative and intriguing. fonz.org/gala



Heron Hotel

The Zoo is D.C.'s only known rookery for black-crowned night herons. These migratory birds arrive each spring, then spend the summer nesting and having chicks. They're fun to spot in the air or the trees as you roam the Zoo.

fonz.org/herons



Daily Discoveries

Every day at the Zoo brings abundant opportunities to meet keepers and their charges, observe animal training sessions, and see the excitement of feeding time. fonz.org/daily

EXCLUSIVE: Early Bird Member Access

One Saturday each month, an animal exhibit will open an hour early—exclusively for FONZ members. fonz.org/earlybird

June 10: Amazonia

July 8: Giant Pandas

August 12: Small Mammal House

September 16: Reptile Discovery Center

TIGER COURTSHIP

Last September, the Zoo's new male Sumatran tiger, Sparky (below), was introduced to Damai (right). The pairing was recommended by the Species Survival Plan for Sumatran tigers, which are critically endangered. Only about 400 remain in the wild.

Since that introduction, Sparky and Damai have become an item. Their first interactions were through a mesh door that let them see, hear, and smell each other while still being physically separated. After that, they started vocalizing. They then rubbed their heads together, marking each other with scents from glands above their eyebrows.

When keepers introduced them, the pair bred. So far, there are no signs that Damai is pregnant, but the team is ready. They have begun training her to climb into a special elevated box and hold still for ultrasound exams, as she did during her last pregnancy.

You can see the Zoo's Sumatran tigers at the Great Cats exhibit.





Eavesdropping on Crocodiles

Knowledge is power when it comes to saving species. The more scientists know about endangered animals, the more effectively they can craft conservation strategies. To that end, researchers at the Reptile Discovery Center are recording vocalizations among the Zoo's two pairs of critically endangered Cuban crocodiles during breeding season.

By matching the recordings with notes from visual monitoring, herpetologist-keeper Lauren Augustine and her colleagues hope to "tease out the different types of vocalizations the crocodiles are using and why they are using them."

Cuban crocodiles are on exhibit at the Reptile Discovery Center.

MEHGAN MURPHY/NZP



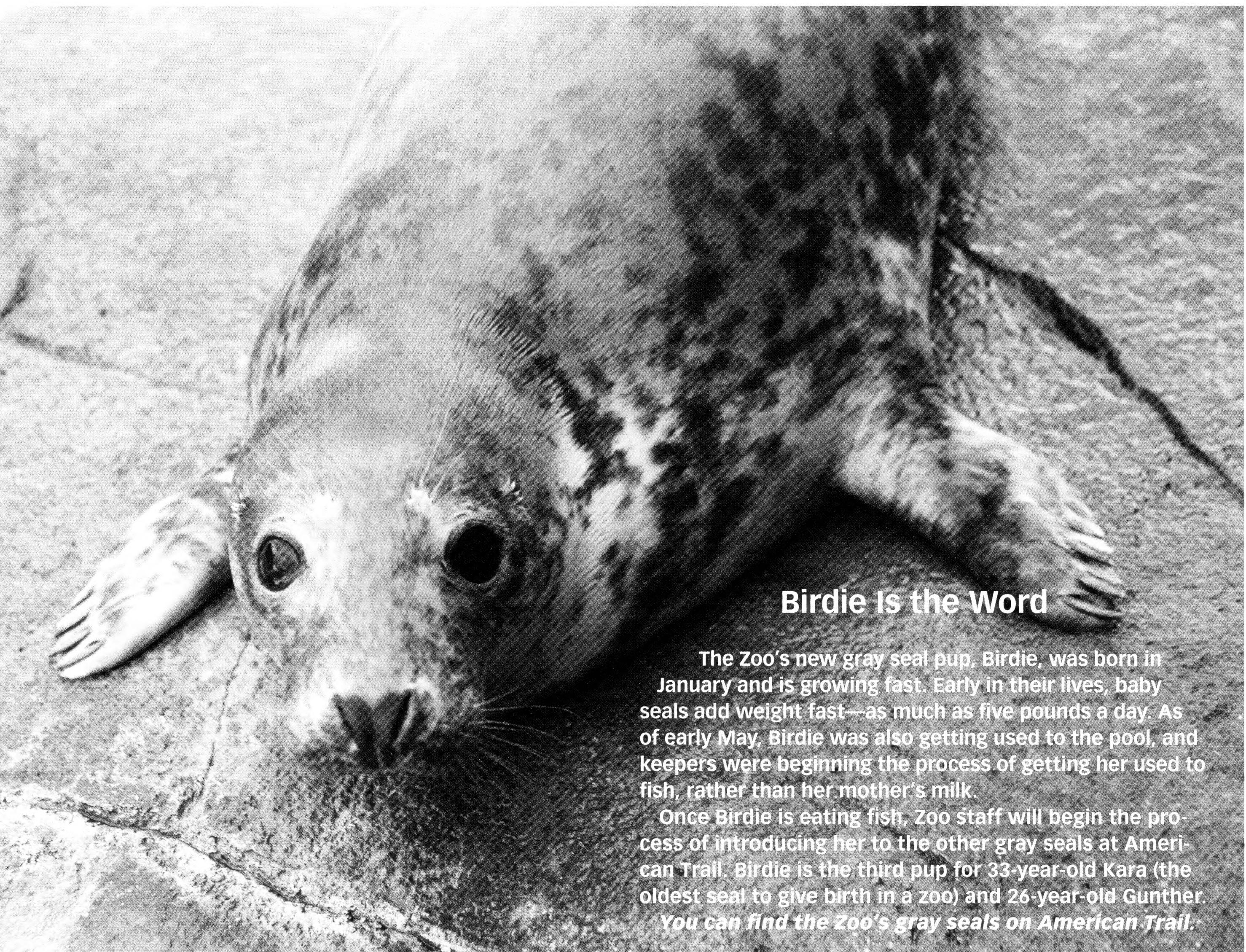
Bei Bei on His Own

Bei Bei is now weaned from his mother, Mei Xiang, and lives on his own in a separate part of the David M. Rubenstein Family Giant Panda Habitat. Pandas are solitary animals in the wild. Mothers and cubs part once the cub is self-sufficient.

Based on their experience raising Bao Bao—and the expertise of panda keepers at other zoos—the animal care team determined that 18 months is the right point to wean cubs, provided they are getting most of their nutrition by eating bamboo and other solid foods. The keepers began separating Bei Bei and Mei Xiang during a short adjustment period.

Keepers gave Bei Bei extra attention during the transition, but he already has a new favorite activity in his part of the exhibit: napping in a tree. Within about a month of weaning, Mei Xiang was going through hormonal changes and on the verge of estrus, as her body gets ready to potentially breed again.

You can see the Zoo's giant pandas on Asia Trail.



Birdie Is the Word

The Zoo's new gray seal pup, Birdie, was born in January and is growing fast. Early in their lives, baby seals add weight fast—as much as five pounds a day. As of early May, Birdie was also getting used to the pool, and keepers were beginning the process of getting her used to fish, rather than her mother's milk.

Once Birdie is eating fish, Zoo staff will begin the process of introducing her to the other gray seals at American Trail. Birdie is the third pup for 33-year-old Kara (the oldest seal to give birth in a zoo) and 26-year-old Gunther.

You can find the Zoo's gray seals on American Trail.

CHELSEA GRUBBNZP

Boy or Girl?

In February, the Zoo welcomed a baby prehensile-tailed porcupine, known as a porcupette. It was the third offspring born to 7-year-old Clark and 10-year-old Bess. Because porcupette sex organs don't appear for six months or so, Zoo scientists used an innovative technique of extracting DNA from a quill to determine the sex. Verdict? The new porcupette, named Rico, is a boy.

You can see Clark, Bess, and Rico at the Small Mammal House.



ROSHAN PATEL/NZP



Life Partners for Leopards

Two research biologists from SCBI are working with colleagues at the Nashville Zoo on new ways to breed clouded leopards. In the wild, males and females pair up fairly young, and the females conceive easily. But males and females that haven't bonded won't pair up later in life.

As a result, the Species Survival Plan now calls for pairing male and female clouded leopards as young as six to eight weeks and letting them grow up together. In addition, researchers use artificial insemination to breed males and females that aren't bonded.

To boost the success of artificial insemination, scientists are working to track females' hormonal cycles more accurately and experimenting with placing sperm at different locations in the female's reproductive system.

Clouded leopards are on exhibit on Asia Trail.



MELBA BROWN/NZP



ERIN STROMBERG/NZP

BITING COMMENTARY

The Zoo's newest orangutan, Redd, will turn one in September, and he's hitting his developmental milestones right on time. During the spring, he began to sprout teeth, both upper and lower. He's begun trying them out on the vegetables that the Zoo's orangutans get, including lettuce, peppers, squash, and zucchini. Redd also nibbles the toes of 40-year-old Bonnie! She adores him and enjoys the attention.

Ultimately, Redd will have 32 teeth, just as humans do. Unlike a human baby, however, Redd will continue nursing for about six or so years, getting the bulk of his nutrition from his mom, Batang.

You can see Redd and Batang at the Great Ape House, at Think Tank, or on the O-Line in between.



MELBA BROWN/NZP

FREQUENT Flier



NATHAN COOPER/SMBC

For the first time, scientists at the Smithsonian Migratory Bird Center have tracked the full migratory cycle for one of North America's rarest birds, the Kirtland's warbler. Just 2,300 males remain. (Females, which do not sing, are nearly impossible to count.) The warblers spend their summers in northern Michigan and their winters in the Bahamas.

To learn more, the scientists fitted dozens of the warblers with tiny geolocators that can track and record their position. Each device weighs half a gram, about as much as a paperclip. A year later, scientists recaptured the birds and removed the devices.

The geographic data allowed the researchers to map migratory routes for the birds. Among other findings, the warblers flew 1,700 miles in only 16 days. Knowing the full migratory route, researchers can determine the best priorities to help conserve the Kirtland's warbler, such as protecting stopover sites.

The team published its research in the Journal of Avian Biology.

NEAR THREATENED

Species is not yet endangered but could soon become so.
Zoo examples: greater rhea, kori bustard, sand cat,
La Plata three-banded armadillo

VULNERABLE

Species has declined in number and has the potential for extinction. Zoo examples: Andean bear, cheetah, Aldabra tortoise, yellow-spotted Amazon River turtle

ENDANGERED

Sharp drops in population menace the species, putting it at a very high risk of extinction. Zoo examples: Grevy's zebra, North Island brown kiwi, Asian elephant, golden lion tamarin, black-footed ferret

CRITICALLY ENDANGERED

Species faces a huge risk of extinction, perhaps within just a few generations.
Zoo examples: western lowland gorilla, Cuban crocodile, Ruppell's griffon vulture, Panamanian golden frog, brush-tailed bettong

EXTINCT IN THE WILD

Species exists only in human care.

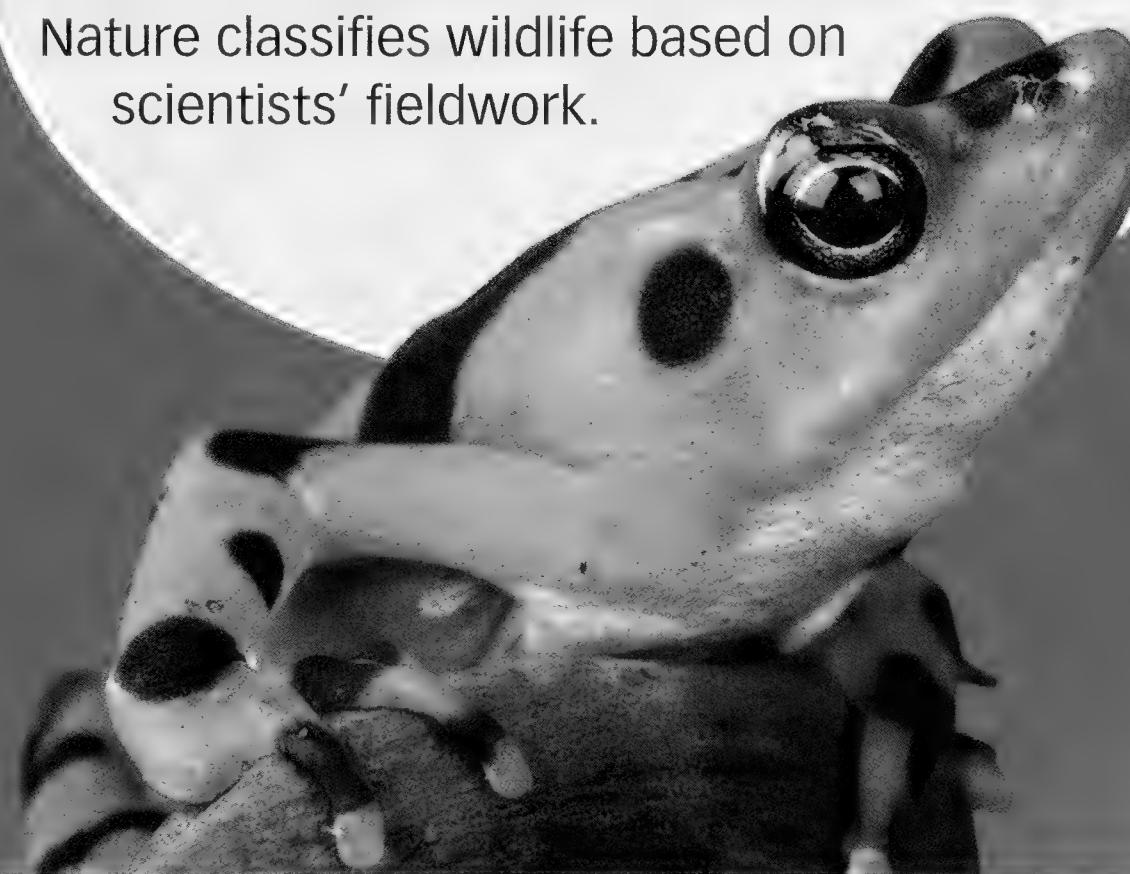
EXTINCT

No member of this species remains on Earth.

Crucial Classifications

Throughout the Zoo, you'll find information about how a species is faring in the wild.

The International Union for Conservation of Nature classifies wildlife based on scientists' fieldwork.



MELISSA MURPHY/NZP

Brandie Smith

Head of Animal Care

Q: What do you do at the Zoo?

A: I'm the Associate Director, Animal Care Sciences. Basically, this means I'm in charge of all 4,000 animals, their habitats, and the 130 people who care for them. They include keepers, curators, vets, nutritionists, and more.

Q: How did you wind up working here?

A: I've always wanted to work in a zoo. I started 25 years ago as a behavioral research intern at the Pittsburgh Zoo. The best part of my internship was taking care of a binturong named Arthur. My first paid job was as a rhino keeper at the Dallas Zoo. My master's and Ph.D. research focused on genetic management of endangered populations of animals.

I was working as the Vice President for Animal Conservation for the Association of Zoos and Aquariums when I heard there was an opening at the Zoo. I loved the job I was in, but couldn't pass up the once-in-a-lifetime opportunity to work at the Smithsonian's National Zoo. Nine years later, I'm still here.

Q: What's your favorite part of the job?

A: Every day is different, and anything can happen.

Q: What's the most challenging part of your work?

A: Every day is different, and anything can happen.

Q: What's the coolest or strangest thing you've learned working at the Zoo?

A: I've spent a lot of time working with the giant pandas, and it's been a real privilege to learn about these amazing animals—not just as a species, but as individual bears. Female giant pandas have such a narrow window for estrus, and a male giant panda can pinpoint peak estrus to the minute. It's spectacular to watch the behavior of these animals and see how perfectly they have evolved to conserve energy for survival and enhance their chances of reproductive success.

Q: What's your favorite Zoo animal? Why?

A: I don't have a single favorite animal, but I do have favorites in time. For example, yesterday, I was holding a tenrec and learned from the Small Mammal House's assistant curator that these animals will scent-anoint toxins from other species so that they smell "poisonous" to predators and don't get eaten. The other day, I was fascinated by the Grand Cayman Island iguana and how much he likes interacting with his keepers during bath time. Pretty much every day, I have some animal remind me that I have the best job in the world.



**If you could tell
Smithsonian Zoogoer
readers one thing,
what would it be?**



COURTESY OF BRANDIE SMITH



ADAM MASON/NZP



PAMELA BAKER-MASSON/NZP

A

A lot of people love animals and want to work with them, but they don't take that career track because it doesn't seem to be the sensible or practical thing to do. I'm here to tell you: Follow your dreams, work hard, and do whatever it is that you love to do.

*Pretty much every day,
I have some animal
remind me that I have
the best job in the world.*

playful nature

BY BRITTANY STEFF

Bears do it.
Cats do it.
Even fearsome crocs do it.

*One way or another,
just about every animal
at the Zoo plays.*

If you believe the children's songs, the world is full of frolicsome animals playing all day. The deer and the antelope play where the buffalo roam. Meantime, five little ducks went out to play, over the hill and far away. And then there are those reindeer games near the North Pole.

Real life usually isn't as whimsical and fun-filled as children's songs, but in this case the musicians may have it right. An astounding number of animal species *do* play. And the study, identification, and understanding of animal play is a serious business.

Play is easy to see but hard to define. For our purposes, it's the process of animals having fun. Play includes goofing off just for the enjoyment of it as well as reveling in amusement and enjoyment. Scientists define play as behavior that doesn't serve any immediate purpose, which an animal engages in when it is relaxed and unstressed.

Play is natural behavior, and it includes both playing with other animals and playing with objects. Play can help animals form bonds with one another and hone skills they'll need later in life. Those cuddly kittens batting a ball of wool, for instance, are actually assassins in training. Play also familiarizes creatures with the world around them and the way it works.

Young Ones at Play

The most playful creatures—human or not—are usually the young. They're the ones that typically have the most time and energy, and have the most to gain from play.

As primate keeper Heather Harl explains, "Baraka, our silverback gorilla, is not going to play as much because his job is to look after the group." But younger primates play often. Kibibi, the youngest gorilla, has been a favorite for Zoo visitors thanks to her constant playfulness. Since she's older now—nearly eight!—she plays less, but is still the most playful of the group, often sneaking off to play with Calaya.

At the other end of the spectrum is Redd, the Zoo's eight-month-old orangutan and youngest primate. Like a human infant, he's still too little to play much. As he grows, though, he's become more active, and keepers expect him to be just as rambunctious as any young ape.

For now, the most playful primates at the Zoo are probably the lemur triplets at the Small Mammal House. They play constantly, like a trio of toddlers. Assistant curator Kenton Kerns says, "They jump on plants and use them like trampolines. If something spins, they'll spin it. They'll drop things to the ground just to see what will happen."



playful nature



BARBARA STATA/FONZ PHOTO CLUB

BY BARBARA STATA
PHOTOGRAPH BY BARBARA STATA
The most playful
of the Zoo's Lowland
gorillas.

THIS PAGE: The red ruffed
lemur triplets, on exhibit at
the Small Mammal House,
constantly, like a trio
of clowns.

Opposite page:
Gorilla mom
and baby.



BARBARA STATA/FONZ PHOTO CLUB



JANICE SVEDA/FONZ PHOTO CLUB

Young animals often bring out the playful side of the grown-ups. Both Damai the Sumatran tiger and Billie Jean the Andean bear are far more playful as mothers than they were without cubs. Lion and tiger cubs play just as a kitten would—well, a kitten that weighs four times more than your typical housecat. And Andean bear cubs are particularly playful.

Great cat and Andean bear assistant curator Leigh Pitsko says, “The Andean bear cubs get into anything and everything. They play nonstop. They’ll take anything and make it into a toy. They’ll throw it, tear it into little pieces, try to pry it apart. They’re almost like little kids; it’s like they want to take things apart and see how they work.”

“As a keeper,” Pitsko continues, “Every animal baby I’ve ever worked with has

played in its own way: cats, bears, anteaters, reptiles. Everything plays.”

An Array of Play

Some animals stay playful long after adolescence. Asian small-clawed otters mate for life and live in family groups. Play behavior, like grooming, helps reinforce social bonds. Like all otters, the small-clawed otters love playing in the water: diving, wrestling, and splashing. But these particular otters are famous for another behavior—juggling.

Asia Trail keeper Tallie Wiles explains, “They’ll lie on their backs and juggle, or stand up and juggle: passing objects from one paw to another. They’ll juggle fish, their food, or anything they can find, though their favorite toys are rocks.”

If the otters aren’t juggling, they’re usually wrestling, romping in their yard,

chasing butterflies, or just carrying things around. “For whatever reason, our otters like to pick up live frogs, tuck them under their arms, and carry them into and out of their indoor quarters,” Wiles says. “Kevin, in particular, is always trying to bring a wild toad that lives in the exhibit inside with him. They’re just hilarious. It’s like having a bunch of little kids around.”

Other animals play, but are secretive about it. Fishing cats like to play with toys, just as housecats do. But they immediately act nonchalant if anyone catches them at it. Human company has the opposite effect on Mook, a clouded leopard.

Mook was hand-reared and has an especially close bond with her keepers. While most Zoo visitors will find her resting or reclining—she is elderly for a clouded leopard—she knows when her keepers make their rounds, and likes to hide and then

Are They Playing?

One of the great challenges animal play poses for Zoo staff is determining whether animals are indeed playing. That’s especially vital when two creatures seem to be sparring.

A key clue, say keepers all over the Zoo, is vocalization. True fights are usually accompanied by fearsome vocalizations. If two animals are tussling but not hollering at each other, the odds are that they’re simply playing.

That distinction, though, can be difficult to make. It often requires the deep knowledge that only well-educated, experienced keepers possess.



playful nature



MICHAEL MURRAY/NZP

Annean bears—such as Chaska, born at the Zoo in 2010 and now at the Salisbury Zoo—get into “anything and everything,” as one keeper put it.



MICHAEL MURRAY/NZP



MICHAEL MURRAY/NZP

jump out, surprising them with a feline version of hide-and-seek.

Remi, a sloth bear, also plays with humans, though she doesn't limit herself to her keepers. Remi was hand-reared after her mother abandoned her, so keepers had to teach her how to be a bear.

Keeper Mindy Babitz explains, "Sloth bears are goofy, and they love to play. They'll do a play-bow just like a dog does, and then they want to wrestle. But Remi has to modify it because we don't have physical contact with her. So instead of wrestling, she'll bite her own arm or foot and roll around doing a sloth-bear laugh."

Remi even invites visitors to play with her. She'll try to jump up and hit a visitor's hand where it rests against the glass as a solicitation to play, a behavior that can look like aggression if visitors don't know what she's doing. She also peers around the posts of her exhibit like a child playing peekaboo.

Unexpectedly Playful

Sea lions look like seagoing black labs, so people expect them to play. And they do: with each other, with visitors along the glass, and with water sprays and raindrops. The enclosure is often festooned with toys for their enrichment and stimulation. But the ones really enthralled by the toys are the sea lions' exhibit-mates, the brown pelicans.

"I had never seen a pelican play," American Trail keeper Chelsea Grubb explains. "You think they kind of just float on the water, dive for food, and sit on nests. But here they toss the sea lion toys around. They toss them up in the air, push them around in the water, and chase one another. One scoops a toy up in his pouch and then drains all the water out of it, repeatedly. He knows it isn't anything that would be useful in his life. It's just fun."

Other birds play too. The Ruppell's griffon vultures enjoy tug-of-war with their keepers, and Alice the Stanley crane loves



MINDY BABITZ/NZP



MINDY BABITZ/NZP



MINDY BABITZ/NZP

Sloth bear Remi plays hide-and-seek.

Keeper Mindy Babitz explains, "Sloth bears are goofy, and they love to play. They'll do a play-bow just like a dog does, and then they want to wrestle."

to catch a ball—"like a little dog," according to keeper Elizabeth Fisher. And play is often taken as a sign of the intelligence of ravens, parrots, and macaws.

Play abounds at the Small Mammal House as well. The sand cat tosses her food in the air and catches it again. The tamanduas stand on their back legs and wrestle like pros. The degus and the mongooses like to run in jumbo "hamster wheels."

Next door, the Reptile Discovery Center has been home to some groundbreaking discoveries about reptilian recreation. In the late 1980s, a soft-shelled turtle named Pigface—in honor of his snout-like nose—had the dismaying habit of chewing on himself.

In an effort to stop his self-mutilation, keepers gave him hoops, balls, and other toys. It worked. Not only did Pigface stop chewing on himself, he started spending a significant portion of his time playing. He was one of the first reptiles to be documented as doing so, but certainly not the last.

Recently, herpetologist-keeper Lauren Augustine documented recreational behavior in a species not known for its playful nature—the Cuban crocodile.



GIL MYERS/NZP



GIL MYERS/NZP

Help Stock the Toy Chest

The Zoo's inhabitants treasure their toys. That's not surprising, since play—a key part of animal enrichment—promotes both physical and mental stimulation.

Like kids, Zoo animals can be pretty tough on their toys, so the animal care team constantly replenishes the toy box. You can help by contributing to the enrichment program (fonz.org/toys) or purchasing items from our Amazon wish list (fonz.org/wishlist).



Scientists knew that crocodiles seek out running water from a hose. But now Augustine has evidence that Cuban crocs play with objects as well.

The crocs had three cinder blocks in their exhibit for training purposes. One was white, one was gray, and one was black. Every night, the black brick would end up in the pool. The keepers never saw the crocs move it; it was just in the water each morning.

Then one day, Augustine spotted the male crocodile with the cinder block in his mouth. He held it tight as the weight pulled him to the bottom of the pool—blowing bubbles all the while. After repeated observation, it was clear this qualified as play behavior, one of the first examples documented in Cuban crocodiles.

"We are spending more time training and enriching our animals than ever before," Augustine explains. "And that's giving us more opportunities to see play in creatures it's never been recorded in before." Creatures that play include Komodo dragons, birds, rodents, and

even fish, once thought not intelligent enough to play.

The Play's the Thing

"Play is part of a behavioral repertoire in the wild," says American Trail keeper Chelsea Grubb. "It's important to replicate it here. It is our responsibility to give our animals opportunities for play. We have to know their natural history so that we know what opportunities to give them."

Doing that takes keen observation, a deep knowledge of the species, and a good grasp of an individual animal's personality. What delights one animal could annoy another. With time and practice, though, keepers become adept at pairing players with playthings.

Next time you visit the Zoo, keep a sharp eye out for animals at play. You won't just see a bit of fun. You'll be glimpsing behavior that keeps animals healthy, happy, and true to their wildest selves. **SZ**

—Freelance writer BRITTANY STEFF is a regular contributor to the magazine.

ABOVE: Asian small-clawed otters turn everything in their exhibit into a toy.

BETWEEN: Redd, the Zoo's infant orangutan, enjoys playing and exploring.

FACING PAGE: Ruppell's griffon vultures, like Tuck, will play tug-of-war with their keepers.

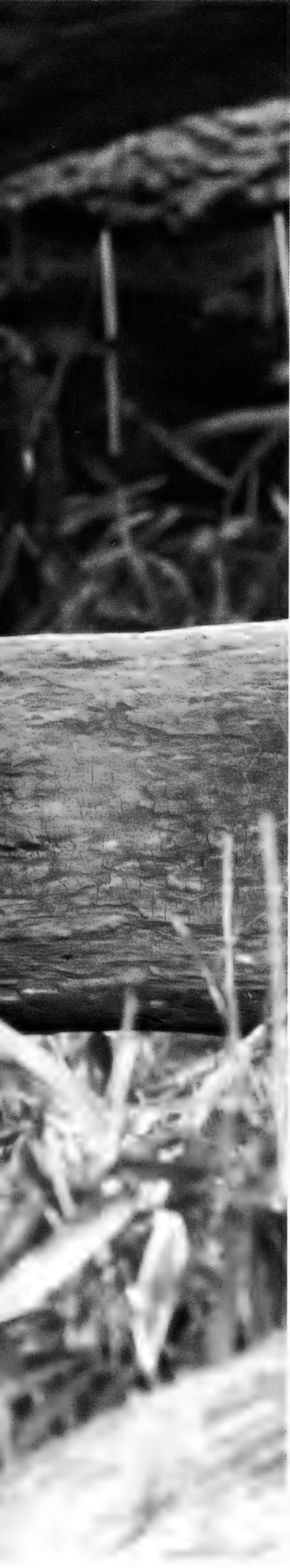


MELBA BROWN/NZP



Watchful Eyes

BY HOWARD YOUTH



FONZ behavior watchers are vital contributors to Smithsonian science.

It's a blustery mid-March morning with a wind-chill in the teens. Impervious, Bei Bei, the Zoo's youthful giant panda, dangles upside-down from a branch 15 feet above the ground. The equally youthful tree struggles to support the bear's 139 pounds. And Leslie Wilkes, her curly blond hair riffled by the icy breeze, watches it all.

Wilkes is a FONZ behavior watcher, a specialized volunteer who gathers information about the activities of Zoo animals. She's used to monitoring Bei Bei's every move.

"If I were filling in a data sheet for this," she explains, "I'd probably code this for 'solitary physical play'—also called goofing around. Look at him. He's just playing." His front paws still dangling earthward, Bei Bei starts swinging back and forth. Then he rights himself, front paws on one thin branch, hind paws on another.

What comes next is no surprise. *Snap!* The branch on which Bei Bei's front paws rested plumb-

mets to the ground. What is surprising, at least to a layman, is that Bei Bei doesn't tumble down too. He simply looks down for a few seconds, his haunches settled on another flimsy branch still attached to the young tree.

"He had both forepaws on it but his hind legs kicked in, and he didn't fall. Bears have five points of contact: four legs and a chin," says Wilkes. "He's still learning."

Wilkes's blue eyes follow Bei Bei fondly as he shimmies his bulky body down the trunk. "I don't know if he's broken off a branch before," she says. I feel privileged to have witnessed something possibly unprecedented with a person who's watched pandas since 2005.

In the Beginning

FONZ's Behavior Watch program began in the late 1960s when the Zoo sought volunteers to keep tabs on an expectant gorilla viewed via a TV



MARKIBRAHIM/NZP

Watchful Eyes

monitor in the Small Mammal House. Over the years, the methods and equipment have advanced, and behavior watchers' contributions have grown apace.

"I think the program gives a really special experience to people interested in science and especially interested in the Zoo," says Caroline Winslow, a program supervisor in FONZ's Department of Education and Volunteer Services. She oversees the project.

Winslow began as a FONZ volunteer behavior watcher herself. That was in 1972, when the arrival of giant pandas Ling-Ling and Hsing-Hsing—gifts from China—thrilled the city and the nation.

In those first years, Winslow remembers, the going could be tough. "We sat on a bench in the dark, trying to figure out what the pandas were doing. It was so dark you couldn't see anything. It was different back then."

Behavior Watch has grown to embrace many other animals—including lions and elephants. And then there are the kori bustards.

Bustard Behavior

Native to eastern and southern Africa, kori bustards—the males, at least—are probably the heaviest birds that can fly, albeit rarely and reluctantly. The Zoo has a flock of them, which Winslow describes as a challenge to monitor. "It is very, very intricate. You look for beak gapes, feather twitches, and head cocks."

That hard work—17 years of it—has paid off tremendously. Behavior Watch data helps Bird House curator Sara Hallager and her colleagues hone their management practices to best suit the animals. Hallager also coordinates the kori bustard Species Survival Plan and maintains the international studbook.

"I'm so impressed by the behavior watchers' dedication," Hallager says. "The data they've collected has improved

PREVIOUS PAGES: Bei Bei at Asia Trail; behavior watcher Mary McQueen in the Giant Panda control room.

OPPOSITE: Behavior watchers have logged 17 years of data on the Zoo's kori bustards—such as this female.

THE DATA'S IN THE DETAILS

Each Panda Watch volunteer is equipped with a data sheet to use during a three-hour shift. The sheet has 37 columns broken down into six sections. Every two minutes, the watcher checks off details about Bei Bei's comings and goings: locations, activity levels, behaviors, and more. Each half hour, the volunteer adds more information. These checklists are turned in after each shift and help build a data set that Zoo scientists and keepers regularly refer to as they continue to demystify the riddles of giant panda natural history.

The image shows two detailed behavioral observation forms. The left form, titled 'NZN African Lion Activity Budget', includes a header with 'Date:', 'Proximity Codes' (e.g., '1=touching, 2=Within 3 yards, 3=more than 3 yards'), 'Time:' (with a grid for 1-60 minutes), 'Enrichment' (with a grid for 1-10 items), and 'Observer:'. Below this is a large grid for recording observations across various categories like 'Luke', 'Shara', 'Shera-Luke', 'Shera-Nala', 'Lioness', 'Stationary', 'Travel', 'Groom', 'Social Groom', 'Social Play', 'Aggressive', 'Groom Cub', 'Nurse Cub', 'Groom & Nurse Cub', 'Play/Physical interact w/Cub', 'Object/Cub's Interactions', 'Groom', 'Eat Vegetation', 'Various Object (hole)', 'Toy Enrichment', 'Dietary Enrichment', 'Investigate (hole)', 'Pace', 'Other (Note)', 'Not Visible', 'Urinate (spout or spray)', 'Urinate without roar', 'Locate', 'Object rub', 'Defecate', 'Paw Substrate', 'Rake/pev tree', and 'Temperature'. The right form, titled 'Data of Observation', includes a header with 'Session (circle one): 8-10 / 10-Noon / Noon-2 / 4-4-5', 'Volunteer Name: _____', and 'Water Temp: _____. Water Temp.'. It features a grid for 'Record all occurrences within the 5 minutes' with columns for 'Time', 'Location', 'Orientation', 'Behavior', 'Arching Back', 'Open mouth', 'Time Spent', 'Surfacing', and 'Comments'. A legend on the right defines symbols for 'Behaviors' (e.g., RE (running), SW (swimming), DE (defecation), SS (Skin Sludging), ES (Eating Skin), F (Grooming, Tearing)), 'Orientations' (e.g., IR (Facing Inward), OS (Facing Sideways), FA (Facing Away)), and 'Notes' (e.g., *Note in Comments how long spent at mesh and add Orientation info if other shammader present). The bottom of both forms contains a legend for weather codes (Sunny, Cloudy, Rain, Snow) and notes for objects, investigations, and other data.

the management of kori bustards at the Zoo, but we've also been able to use their information to change and improve the way kori bustards are managed at other zoos as well."

Not much is known about most of the world's bustard species, both in the wild and under human care, but Hallager says the 5,000-plus hours' worth of data collected by FONZ volunteer behavior watchers and Zoo staff has led to great leaps of understanding. That knowledge is a valuable tool in the struggle to conserve these birds as wild populations decline.

Behavior watchers have also helped to develop an ethogram—an overall list of what kori bustards do. Hallager says it only makes sense that they helped create this profile: "A lot of the watchers, because they're out there so many hours, have seen behaviors I have never seen."

For instance, FONZ volunteer behavior watchers documented a previously unknown courtship behavior called head tossing. Their findings have even been cited in scientific papers.

Stress Tests

Data from behavior watchers helps the Zoo provide the best possible conditions for its residents. In the case of kori bustards, the FONZ volunteers discovered

that sunny yards promote well-being and breeding. When the Elephant Trails exhibit expanded, FONZ volunteer behavior watchers tracked whether the kori bustards were stressed by having their hefty neighbors in closer proximity. They were not.

Behavior watchers also note how many visitors frequent the exhibit area, and how they affect the birds' behavior. "Some of the information coming out of the Behavior Watch was not what I expected," Hallager says.

For example, on busy days, up to 500 people stroll past or gaze at the



Watchful Eyes

kori bustards in their exhibit. "The data showed that, basically, with high crowd levels, females retreated to the back part of the yard." Perhaps no surprise there.

"But the dominant male," Hallager continues, "was at the front of the yard when there were a lot of people. He was kind of checking that things were OK." Hallager hopes behavior watchers will be able to help continue observing the bustards' welfare during the upcoming Bird House renovation.

Picturing Pandas

After 12 years as a volunteer, Wilkes still arrives early and eager for her weekly 7-10 a.m. shift watching the Zoo's giant pandas. "Wednesday is the best day for

me because that's when I do my watch," says Wilkes, dressed in a red volunteer sweatshirt.

"Our watch focuses on Bei Bei," she says. "We've been doing this essentially since he was born." Wilkes started volunteering when Mei Xiang gave birth to Tai Shan, her first surviving cub.

"At that time, the Zoo wanted more observers watching cameras in the birthing den. I thought that was exciting, and so I signed up. It's really interesting to watch the bears lead their bear lives. They're individuals, and so each does things differently."

Inside the David M. Rubenstein Family Giant Panda Habitat, Wilkes

walks me into the camera room, where behavior watcher Luke Mayer sits in front of a bank of large and small screens. His right hand on a joystick, his bespectacled face glowing from the monitors, Mayer looks intent but comfortable in his seat. He's been a Behavior Watch volunteer since 2011.

Mayer swivels the joystick to position and zoom one of 38 cameras as he watches Bei Bei's every move. A keypad in front of him enables him to switch screens to different camera views. Mayer tells Wilkes he's seen Bei Bei acting curious around some ice.

"Bei Bei is experiencing things for the first time," says Wilkes. "We think one

WAITING TO WATCH

Being a FONZ volunteer behavior watcher takes time and patience. So does becoming one. The number of watchers varies with the needs of research projects underway at a given time.

If volunteering for Behavior Watch interests you, you may want to bookmark fonz.org/volneeds and check it often. Until an opportunity arises, you'll see a variety of other ways to help the Zoo save species.



SMITHSONIAN'S NATIONAL ZOO



MARK BRAHIM/NZP



SMITHSONIAN'S NATIONAL ZOO

of them is ice." After an unusually warm winter, mid-March left the outdoor enclosures covered in ice and snow, which the pandas didn't mind one bit.

Another screen shows the next indoor enclosure. Adult female Mei Xiang is lying on her back, holding up a milk jug-like container and pouring its contents—leaf-eater biscuits—into her mouth.

Memorable Moment

Even after hours, days, weeks, months, years of observation, the pandas still surprise Wilkes. In spring 2009, Wilkes watched spellbound as Tai Shan found a mallard nest in his yard. "Usually the pandas ignore the ducks, and the ducks

just move out of the way, as if in respect," she explains.

But this changed when Tai Shan encountered an egg in the nest. What would he do? Although the most vegetarian of bears, wild giant pandas sometimes eat carrion or small animals.

"He picked up the egg the way he does when he looks at an apple. He sniffed it. Then he put it back in the nest," says Wilkes, smiling at the memory. "You have to watch a lot of hours to see such interesting things." SZ

—Former FONZ editor and communications manager HOWARD YOUTH writes on a variety of environmental and travel topics.

OPPOSITE PAGE: Volunteers Allison Kerbel (at left) and Judy Moy (at right) patiently record animal activity.

BELOW: Volunteer Pat Purcell (red shirt) and Zoo staff keep watch in the giant panda control room in August 2013, the month when Bao Bao was born.



"The cat is one animal nature pretty much got right the first time around," wrote Cathy Newman in *National Geographic*. "The story of cats is ultimately a story about design."

Functionally, that design has proven versatile and hardy. All 36 species of wild cats have strikingly similar anatomies, equipping the animals to be fierce predators.

Not so for the surface. Felids have evolved a *Vogue*-worthy array of outfits and accessories—serving not style but survival.

BY PETER WINKLER

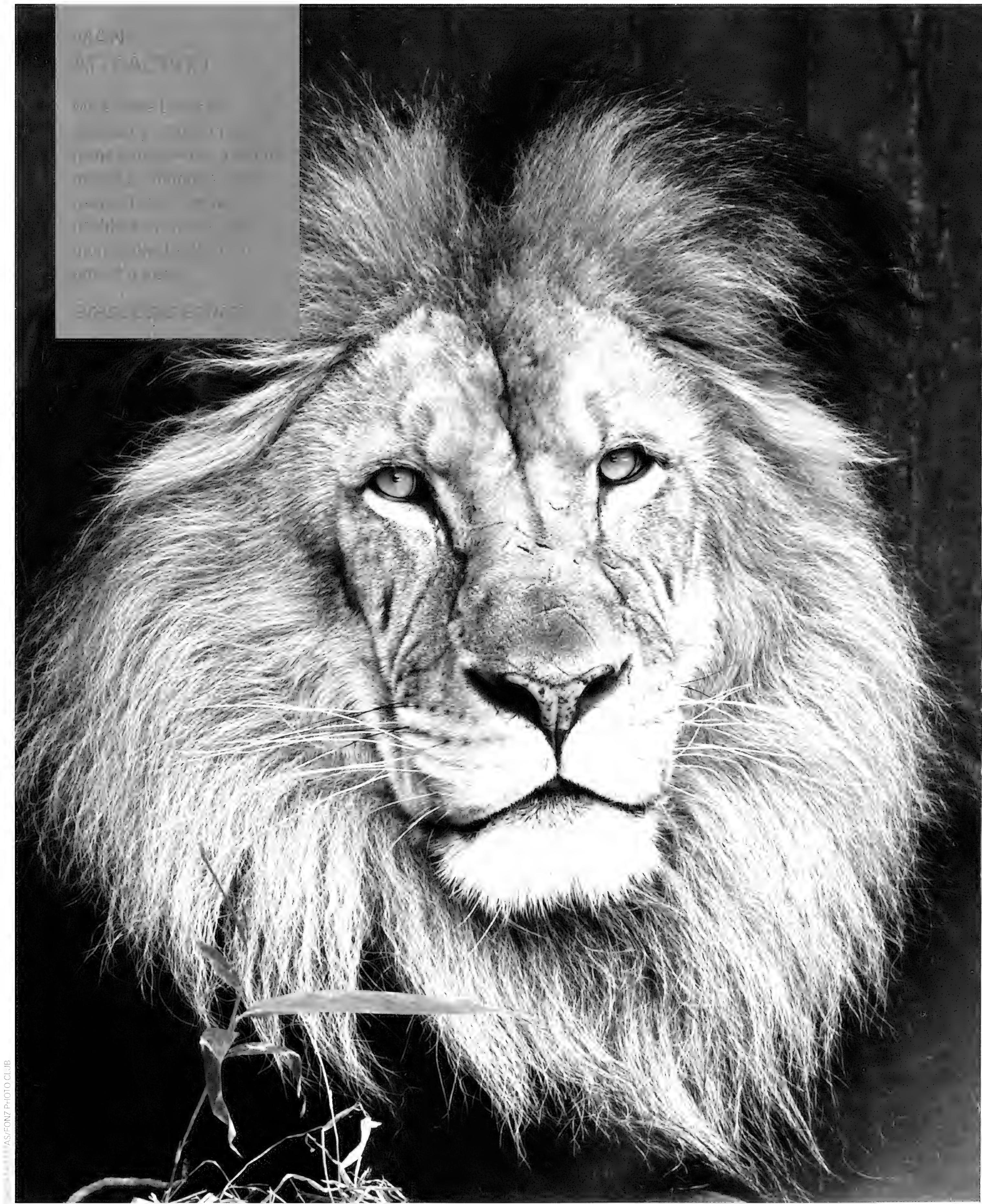
CAT COUTURE

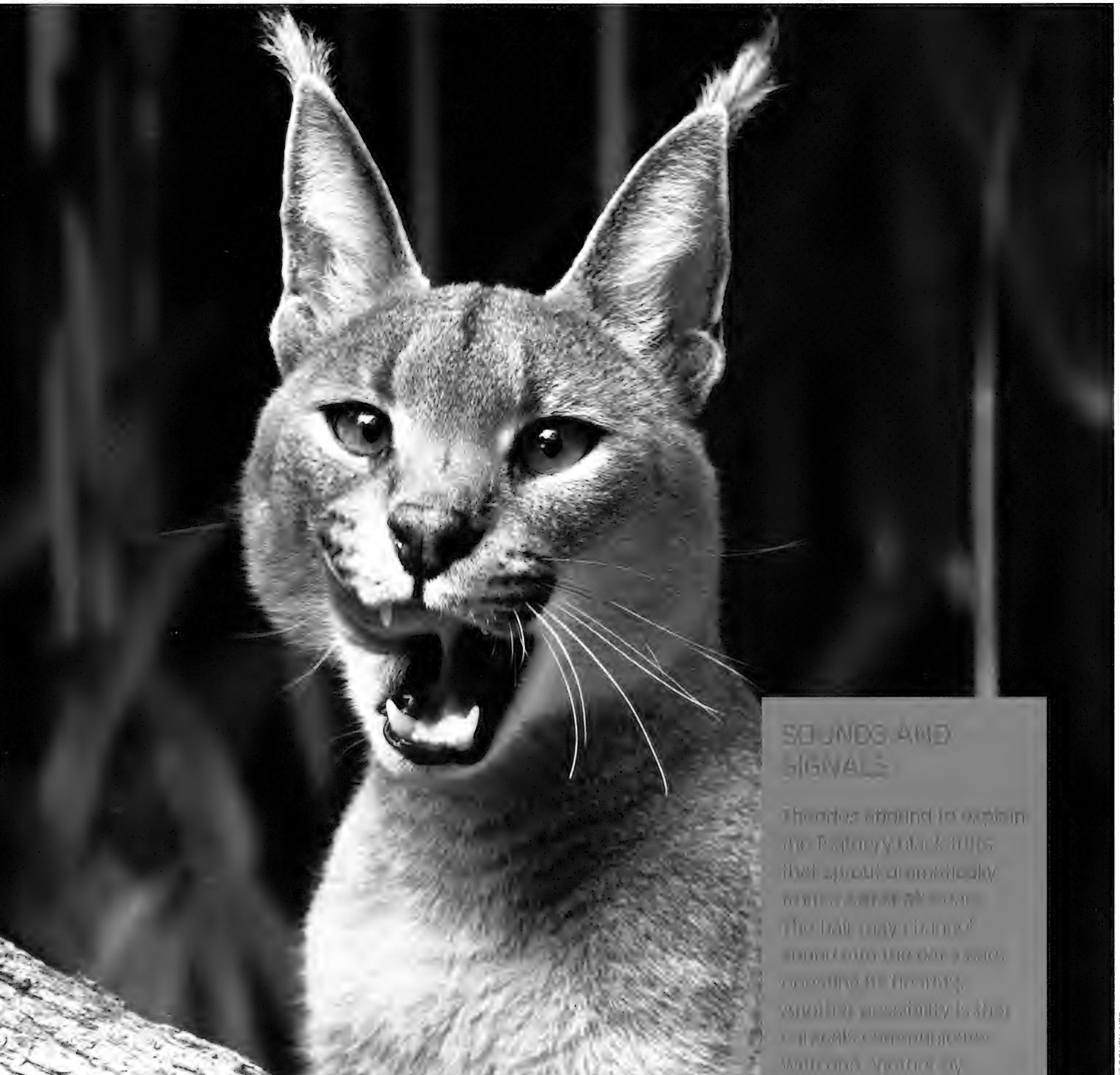


HIDDEN HUNTER

Stark, dark stripes help **tigers**—the largest land-based mammals to live solely on meat—stalk prey. As the tiger waits silently, its light-and-dark coat helps it blend in with the mix of vegetation and shadows in its forest habitat.

Great Cats Exhibit





SOUNDS AND SIGNALS

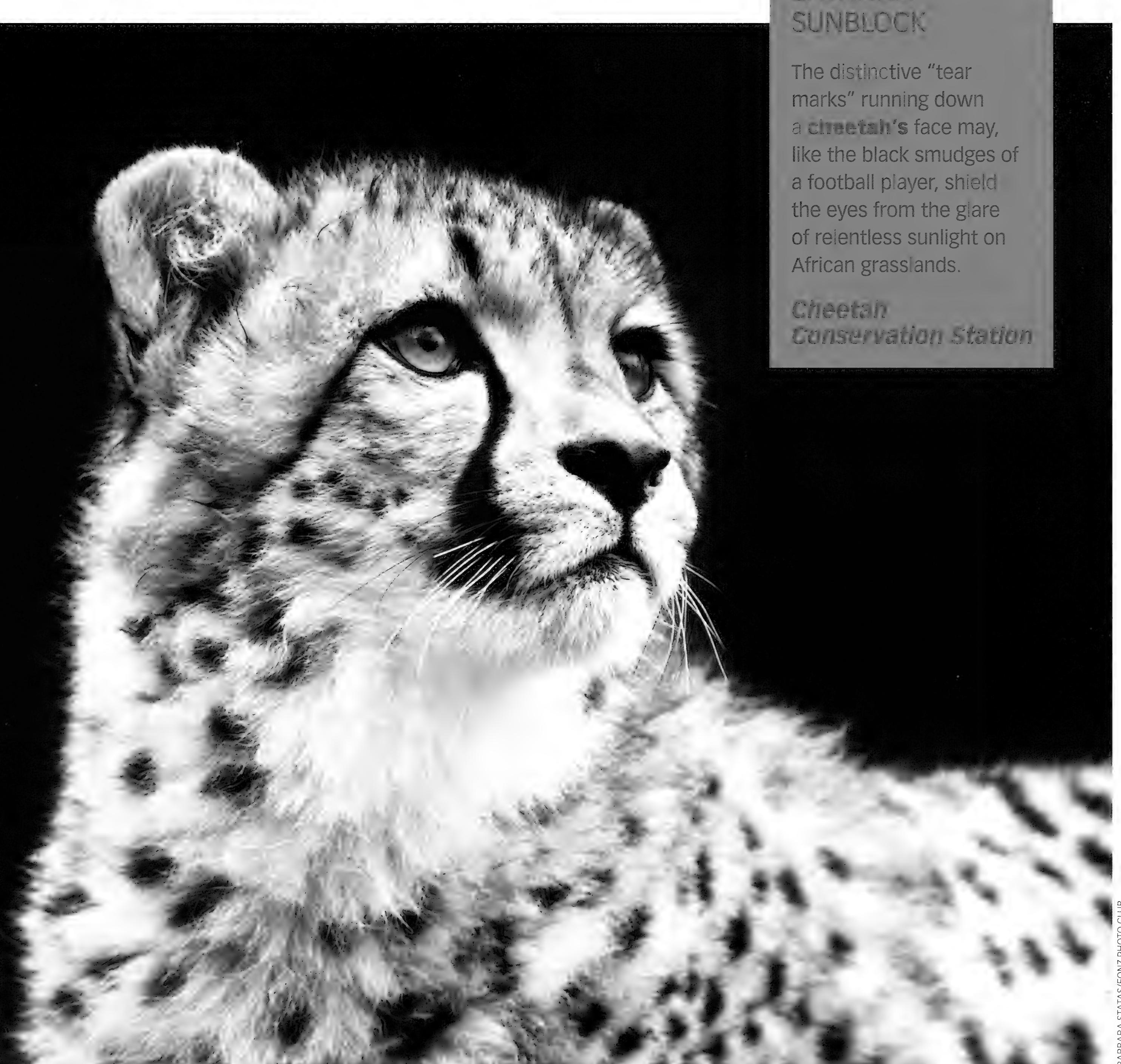
Their fur is sound insulation. They have thick whiskers that spread dramatically from their faces. The tail may contain some of the best insulation, possibly because it's a great energy generator. Spontaneously switching on is an odd, *cat-at-cat*, behavior.

DOUBLE Panda Power

After years of trying to breed giant pandas, the National Zoo's team of scientists and keepers has finally succeeded. Here's how they did it.

By Jennifer

CAT COUTURE



SAVANNA SUNBLOCK

The distinctive “tear marks” running down a **cheetah’s** face may, like the black smudges of a football player, shield the eyes from the glare of relentless sunlight on African grasslands.

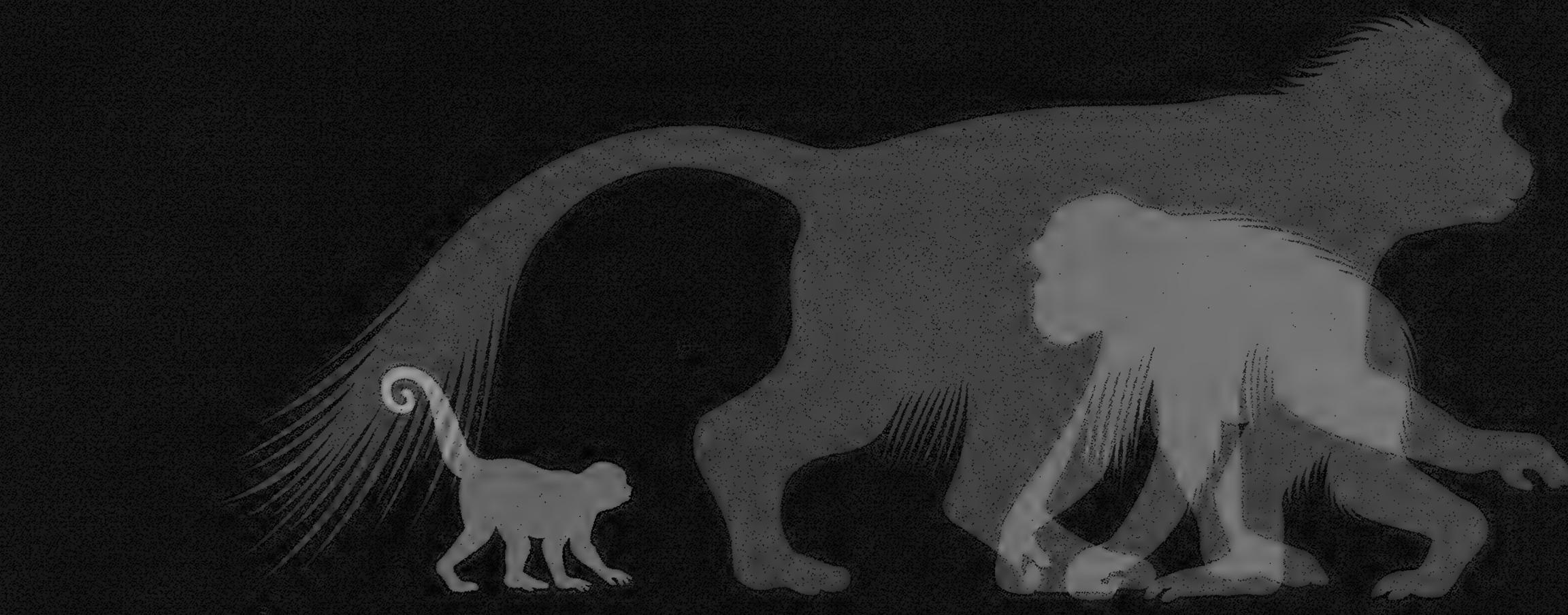
*Cheetah
Conservation Station*



SECRETIVE STALKERS

In the savanna, the slender servals are the ultimate stalkers. They stalk their prey from a distance, using their long legs to leap with lightning speed to pounce on unsuspecting birds, lizards, or insects. Their long legs also allow them to leap over bushes and low-hanging branches to get to the best vantage points.

Asia Trail



JOIN US
FOR SOME
Monkey Business
TO BENEFIT
THE SMITHSONIAN'S NATIONAL ZOO
AND CONSERVATION BIOLOGY INSTITUTE

HONORING HARRISON FORD AND BETTY WHITE

THURSDAY, SEPTEMBER 28, 2017

ROBERT AND ARLENE KOGOD COURTYARD
WASHINGTON, DC

FOR MORE INFORMATION AND TO PURCHASE TICKETS
NATIONALZOO.SI.EDU/GALA

IN PARTNERSHIP WITH FRIENDS OF THE NATIONAL ZOO

BEAST BITS

Little Stinkers

Striped skunks are easy to spot.

They have black coats with two thick, white stripes along the back and tail. If you see one, don't get too close!

When threatened, skunks spray a gross-smelling fluid from two glands under their tail. If it hits an attacker's eyes, it can cause temporary blindness. The good news?

Skunks usually give a warning first, by raising their tails and stomping their feet.



Fun Fact

Baby striped skunks can spray their smelly fluid when they're just eight days old. That's before they can even open their eyes!

Good as Gold

Golden lion tamarins are small, playful monkeys. They weigh as little as a

pound and a half. At the Small Mammal House, you can easily see how they got their name. Just

like lions, they have manes of golden hair. After almost going extinct in the 1970s, golden lion tamarins have rebounded in their native Brazil, thanks to a lot of hard work by Zoo scientists. Today, there

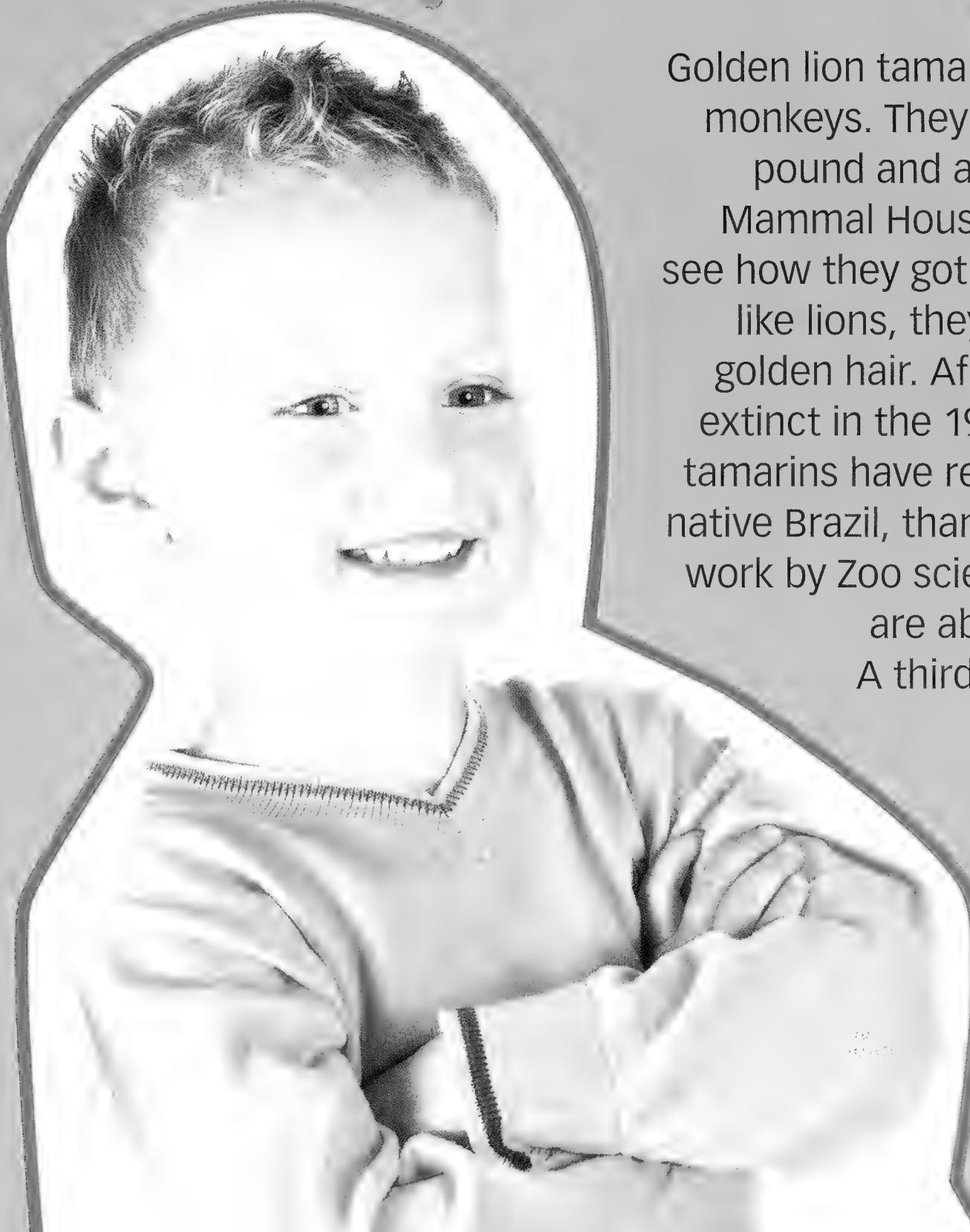
are about 3,200 in the wild.

A third of those are descended from zoo-born animals.



MEGAN MURPHY/NZP

You can see golden lion tamarins and striped skunks at the Small Mammal House.





**Huge ears help
tiny fennec
foxes survive
in harsh
deserts.**

THREE CHEERS FOR BIG ears!

BY SARAH BELLINGER

CREATURE FEATURE

It may look like a cross between a Chihuahua and an alien, but the fennec fox—the smallest animal in the dog family—has some surprising adaptations to help it thrive in tough climates.

Can You EAR Me? The giant ears of a fennec fox are ideal for cooling it down in the deserts of Africa and Arabia, where it lives. (Elephants' ears perform the same function.) Fennec fox ears are also ideal for listening to prey moving under the sand.

It's GETTING HOT Out Here Light fur provides great camouflage in fennec foxes' sandy environment. They even have fur on their paws, giving them traction and protecting them from the hot sand. Fennec foxes can go for long periods of time without drinking very much. They get most of their water from the food they eat.

BARBARA STATA/FONZ PHOTO CLUB

SMITHSONIAN
zoogoer kids
CORNER

Take a DEEP BREATH Like many mammals, fennec foxes let heat out of their body by panting. When it's really warm, they can breathe an astonishing 690 times each minute. If you tried that, you'd pass out!

Sleepy FOXES Fennec foxes in the wild are nocturnal. They sleep during the day and stay awake all night—the opposite of you! This helps them avoid the hottest part of the day. They like to sleep in burrows that they dig themselves. A single burrow can be 32 feet long. Each usually has several exits so the foxes can escape in case of danger.

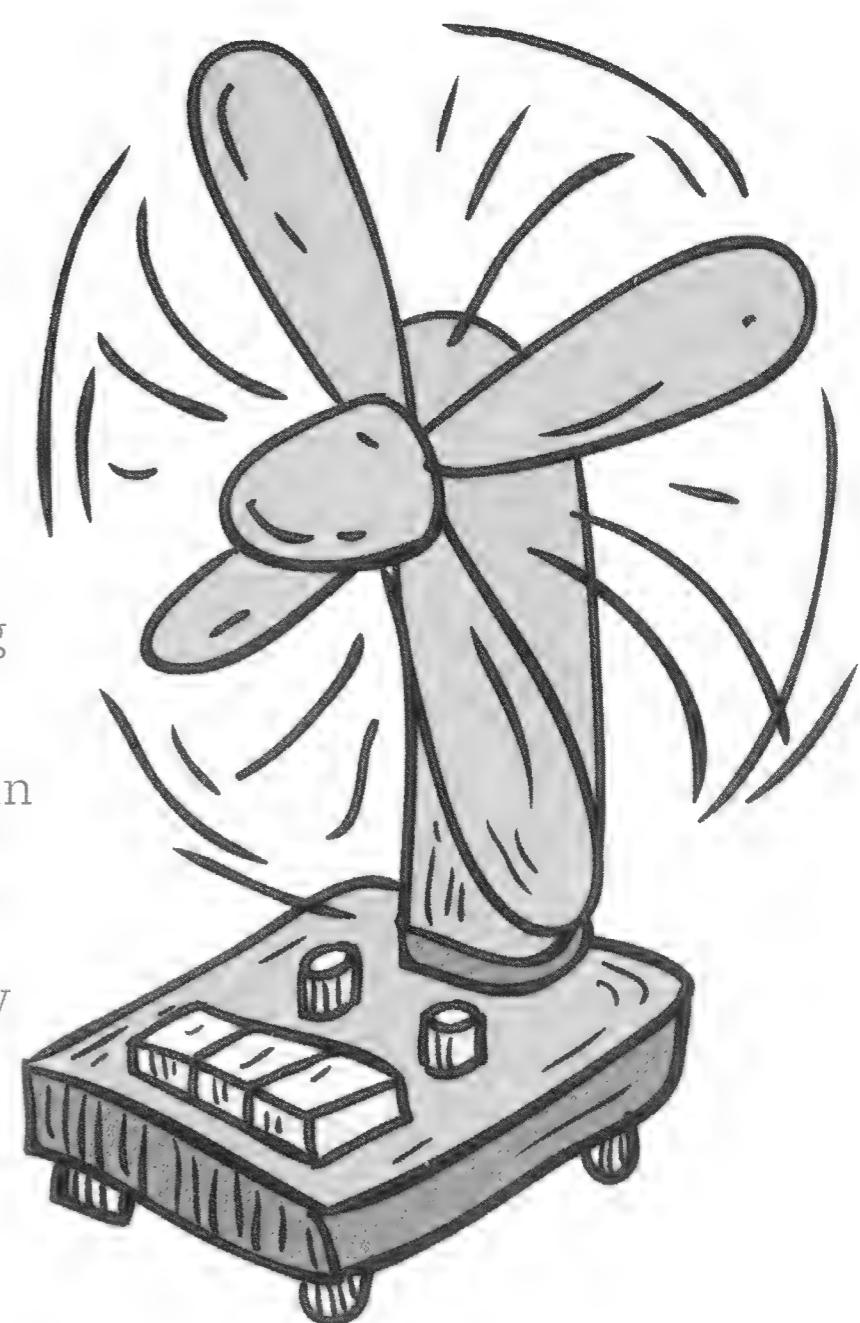
A FEAST for a Fox In the wild, fennec foxes hunt at night. They eat insects—especially grasshoppers and locusts—as well as small rodents, lizards, birds, and their eggs. Snacking on roots, fruits, and leaves helps them stay hydrated.

At the ZOO Scamper over to the Small Mammal House to come face-to-fox with these adorable creatures.

YOUR TURN

Beating the Heat

Big ears, panting, and sleeping underground during the day help fennec foxes cope with desert heat. You may not live in a desert, but summer can still bring scorching days. Can you think of three ways you can keep yourself cool and healthy this summer? Let us know at zoogoer@si.edu.



Small Mammals, Big Job

To run the Small Mammal House, Steve Sarro coordinates the care and feeding of more than 30 species.

If you think you're busy some days, think about Steve Sarro's job. As curator of the Zoo's Small Mammal House, he manages a staff of eight keepers who care for golden lion tamarins, brush-tailed bettongs, naked mole-rats, and more than 30 other species.

Bird Lover

Growing up outside of Philadelphia, Sarro always had animals around. "Dogs, cats, fish, birds, rabbits," he says. He studied biology in college and became fascinated with birds, working for a stint at a bird rescue center, along with several zoos. He has also had pet birds over the years, along with cats, dogs, fish, and reptiles. When a position opened up running the Small Mammal House, Sarro jumped at it. "I really wanted to work for the Smithsonian," he says.

Animal Upgrade

Once he got settled, Sarro and his team made changes. He brought in sand cats, Malay mouse-deer (tiny hooved animals the size of rabbits), tamanduas (tree-dwelling anteaters from South America), and Von der Decken's hornbills, a bird that he put in the meerkat exhibit. "I like to put different animals at different levels of the exhibit," he says.

In addition to creating a more diverse experience for visitors, the species were often brought in for conservation reasons: to breed and help rebuild populations.

Look Out Below!

Sometimes that redesign process leads to interesting interactions. When a female red-ruffed lemur was about to have babies, Sarro worked with the keeper team to modify the exhibit, adding nesting dens (made from dog crates) at different levels and ropes to allow baby lemurs to climb about. Red-ruffed lemurs are critically endangered in their native Madagascar, and



COURTESY SMITH/FONZ

their safety and breeding success was vital for the species' future.

Sarro also put in live plants, to make the space more vibrant. After Sarro placed a couple of huge philodendron plants in the exhibit, the baby lemurs started jumping off the top level of rocks, spread-eagled, right onto the plants. "It turned into a giant enrichment item for them," Sarro says. "Just pure play. The plants didn't survive, but it was awesome to watch."

Future Conservationists Welcome!

Sarro never forgets that the Zoo's most important visitors are its smallest. "I love that most of our exhibits are really low to the ground," he says. "The kids who come to the Zoo today are the ones that could really make a difference in this world when they're grown-ups. We save individual animals, and we save species, but we also educate visitors. When kids leave the Zoo, they should know a little more, care a little more, and understand what's at stake in the future. That's a crucial part of what we do."

—JEFF GARIGLIANO



Good day.

Great day.

FONZ RESOURCES

fonz.org

Member/Donor Information
202.633.2922

Special Events
202.633.4470

Corporate Events
202.633.3045

Camps and Classes
202.633.3024

Public Programs and Volunteer Services
202.633.3025

Comments? Questions?

Please email us at
fonzmember@si.edu

Not a FONZ member yet?

Call 202.633.2922
or go to
fonz.org/join



FONZ Children's Classes

Learning is WILD at the National Zoo!

FONZ classes use hands-on activities, crafts, and the Zoo's animal collection to help your child learn about environmental conservation and life science while strengthening important developmental and social skills. Whether you prefer a regular, weekly experience with your child or a one-time event for the family, you are sure to find a class to suit the needs of your young animal lover.

Classes do not include behind-the-scenes visits or direct contact with the animals, but do use pelts, bones, feathers, and other touchable artifacts.

Pre-registration is required for all children's classes. See detailed descriptions and register at fonz.org/classes.

Enter discount code **TIGER2017** at the checkout screen to secure the member rate.

Nature Cubs Summer Series
\$90 (FONZ members)
\$113 (non-members)

Weekend and Single-Session Classes
\$28 per child (FONZ members)
\$35 per child (non-members)



FONZ EDUCATION DEPARTMENT

NEW! NATURE CUBS SUMMER SERIES

New this summer, Nature Cubs summer classes meet once a week for three weeks and help children learn about animals and the natural world while developing important academic and social skills.

Splash into Summer Time!

Cool down with some of the Zoo's favorite watery wonders! Dive in as we learn about otters, sea lions, and more!

June 13-29, 9-10:30 a.m.
Ages 2-3: Tuesdays or Wednesdays
Ages 3-5: Thursdays

Mooo-ving and Grrrr-ooving

Leap into learning and pounce on some playtime as we explore some of the most fascinating movers and shakers of the animal kingdom.

July 11-27, 9-10:30 a.m.
Ages 2-3: Tuesdays or Wednesdays
Ages 3-5: Thursdays

SPECIAL EVENTS

Enrichment Extravaganza

Keeping the animals happy, healthy, and active is an important part of every zookeeper's day. Come learn about some of the favorite enrichment treats at the Small Mammal House and make a special enrichment item for the animals!

June 4, 9-11 a.m.
Ages: 4-8 (with parent)

Elephant Birthday Bash

Help celebrate Asian elephant Rani's 27th birthday! Join us for a morning of elephant-themed fun and learning, then make a special enrichment gift for Rani!

July 8, 11:30 a.m.-1:30 p.m.
Ages: 3-6 (with parent)

For prices and registration, please visit fonz.org/classes

WEEKEND AND SINGLE-SESSION CLASSES

Single classes for children and adults to enjoy together, with interactive stations and a hands-on discussion. Classes begin at 9 a.m. and end at 10:30. See fonz.org/classes for more information.



What Does the Fennec Fox Say?

And why does it need such big ears anyway? Say hello to your dog's cutest canine cousin!

June 10, 11

Ages 2-3

Calling All Cats

Discover what makes the Zoo's cool kitties and furry felines so purr-fect.

June 17, 18; July 29, 30

Ages: 2-3

Who's New at the Zoo?

Get to know the new faces, flippers, paws, and claws at the Zoo!

June 24, 25; July 1, 2

Ages: 2-3 or 3-5

Curious George Goes to the Zoo

Put on your yellow hat! We're learning about some of our favorite curious little monkeys at the Zoo!

July 9, 15, 16

Ages: 2-3

Superman-imals

Meet the most amazing superman-imals of the animal kingdom!

July 22 and 23

Ages: 3-5

Ele-Fun

The Zoo's gentle giants want you to join the herd! Try out your own trunk as we learn about elephants.

August 5, 6, 8, 9, 10, 12, 13

Ages: 2-3 or 3-5

Panda Party

Explore the hidden world of these beautiful bears, then visit the Zoo's most famous family!

August 15, 16, 17, 19, 20

Ages: 2-3 or 3-5

Splish-Splash, Sea Lion

Enter the Splash Zone! We're learning about the Zoo's playful pinnipeds!

August 26, 27

Ages: 2-3

Manage Your Membership Online

Want to renew your FONZ membership? (You know you do!) Want to update your address? Want to give a gift membership? Want to contribute to the Zoo's work of saving species?

Now you can do it all easily online. Check your email for a message telling you how to activate your account or visit fonz.org/account to learn how.

Call for FONZ Board Nominations

Chart the future of FONZ by nominating yourself or another current member for our Board of Directors. The volunteer Board works closely with FONZ leadership to guide our efforts and shape our success.

Nominations are due by July 19, 2017, and will be reviewed by the Board of Directors. To learn more and find the nomination form, please visit fonz.org/board.

A big birthday for Lucas

Last year for his birthday, Lucas wanted to do something BIG!

When Lucas saw that **Conservation Nation** was helping elephants, he knew he needed to join the herd. For his big day, he turned his birthday into a fundraiser for **Conservation Nation**, and contributed over \$1,000 to the cause. With just a simple request for donations instead of gifts Lucas made an elephant-sized difference with Conservation Nation.

Join Lucas and fundraise for your birthday or special occasion at ConservationNation.org



A roaring **THANK YOU!** to the many sponsors, restaurants, and wineries that supported ZooFari: Dine for Wildlife, sponsored by GEICO. Their generous contributions created a fantastic night of food, fun, entertainment—and, best of all, funds to support the Zoo's work of saving species. We encourage you to patronize these businesses and thank them for supporting the Zoo.

RESTAURANTS

1789 Restaurant
Agora
Alta Strada
Anthem
Art and Soul

Asia Nine Bar & Lounge
Baked by Yael
Barcelona Wine Bar
Barrel
Bastille
Bistro 525 / Federal City Bar

Bistro Bis / Woodward Table
Blackfinn Ameripub
BRABO
Calvert Woodley Wine & Spirits
The Capital Grille
Captain Gregory's Casolare
Cava Mezze
Cedar Restaurant
Charlie Palmer Steak
Chef Geoff's
CIRCA
Compass Coffee
Congressional Seafood Co.
Cooper's Hawk Winery & Restaurants
Cuba Libre Restaurant
DC Sweet Potato Cake
Dino's Grotto
Dirty Habit
Doi Moi / Estadio / Proof
Dolcezza Gelato
Duke's Counter
El Centro
ENTRYSE Wine Bar and Lounge
Equinox Restaurant
Firefly Restaurant
Fourth Estate at the National Press Club
fyve Restaurant at The Ritz-Carlton
Georgetown Cupcake
The Grilled Oyster Company
The Hamilton
Hank's Cocktail Bar
Hank's Oyster Bar
Hank's Pasta Bar
Halfsmoke
Hard Times Cafe
Hill Country BBQ
Indique
Iron Gate
J.Paul's

Joe's Seafood, Prime Steak & Stone Crab
KoDee Cakes & Café
Lebanese Taverna
Little Coco's
Maggiano's
Masa 14
Mastro's Steakhouse
Matchbox / Ted's Bulletin
McCormick & Schmick's
MGM National Harbor Food Truck
Mintwood Place
Mitsitam Native Foods Cafe
Mon Ami Gabi
Morton's The Steakhouse
Muze
Nazca Mochica
New Heights Restaurant / The Gin Joint
Oceanaire Seafood Room
Old Ebbitt Grill
Osteria Marzano
Pete's New Haven Style Apizza
Pinstripes
Pizzeria Vetri
Policy Restaurant and Lounge
Pretty & Delicious / Chef Huda
The Prospect
The Pub and the People
Purple Patch
Radiator
Range by Bryan Voltaggio
RASA
Redwood Restaurant & Bar
RIS
Rocklands Barbeque and Grilling Company
The Royal
Ruth's Chris Steak House
Santa Lucia Estate Coffee
Sax / Gryphon / Lost Society
Sonoma Restaurant & Wine Bar



MEGHAN MURPHY/NZP



MEGHAN MURPHY/NZP

Sugar & Ice
Sugar Shack Donuts and Coffee
Sugo Osteria
Summer House Santa Monica / Stella Barra Pizzeria
Sweet Home Café
The Tavern at the Henley Park Hotel

TenPenn
Texas de Brazil
Tico
Tonic Restaurant
Urbana Dining & Drinks
Vinoteca
The Wine Kitchen
Zentan / DNV Rooftop

WINERIES

Barefoot Wine & Bubbly
Barton and Guestier
Blackbird Spirits
Constellation Brands
Copper Cane Wines
Delegat
Dogfish Head
Domaine Carneros
Filibuster Distillery
Francis Ford Coppola Winery
Freixenet USA
Hope Family Wines
Infinium Spirits

JP Chenet
Lanterna Distributors
J. Lohr Vineyards & Wines
New Liberty Distillery
New Zealand Wine Navigator
90+ Cellars
Old Town Cellars
Philadelphia Distilling
Prestige Beverage Group
Redemption Rye
Tito's Vodka
Virginia Distillery Company
The Wine Group

LEAD SPONSOR

SPONSORS

GEICO

94.7 fresh fm

BIG BUS
WASHINGTON DC.

D CISCO b r e a k e r s

Coca-Cola

COMCAST

Giant

GROUPON

MGM
NATIONAL HARBOR

NBC 4
WASHINGTON, D.C.

The Washington Post

WASHINGTONIAN

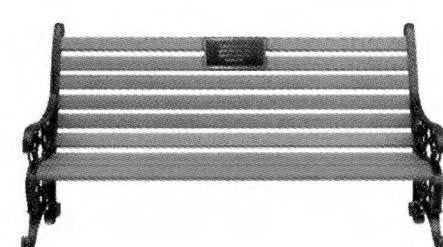
wtop | 103.5 FM
WTOP.COM

ROSENTHAL

JAGUAR

LAND ROVER

Help save species. Help save tired legs.



Zoo benches are a great way to celebrate people who like animals. And sitting.
Order a commemorative bench today at FONZ.ORG/BENCHES



ANGELA NAPILI/FONZ PHOTO CLUB

Hot Day, Cool Tip

Toting her camera down Olmsted Walk, FONZ Photo Club member Angela Napili caught the eye of a stranger, who alerted her to a don't-miss photo opportunity: an orangutan on the O-Line. Napili needed no convincing.

"I ran down and got to see cute Batang in her towel 'hat.' It was quite warm, and a Zoo volunteer mentioned that, on hot days, orangutans sometimes dip their rags in cool water and wear them," she explained.

It was one of those magic moments at the Zoo. A stranger's kind tip, an ape's beat-the-heat hack, and a photographer's eager eye proved the ingredients of an indelible image.

Technical Notes

CAMERA: NIKON D750;
LENS: 70.0-200.0 MM; **FOCAL LENGTH:** 200 MM;
ISO: 125; **EXPOSURE:** 1/1000 SECOND AT F/6.3

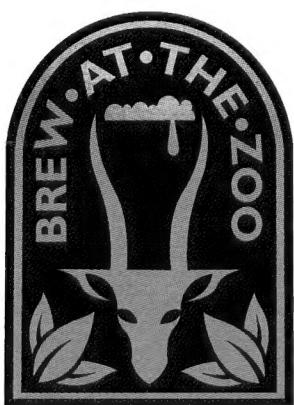
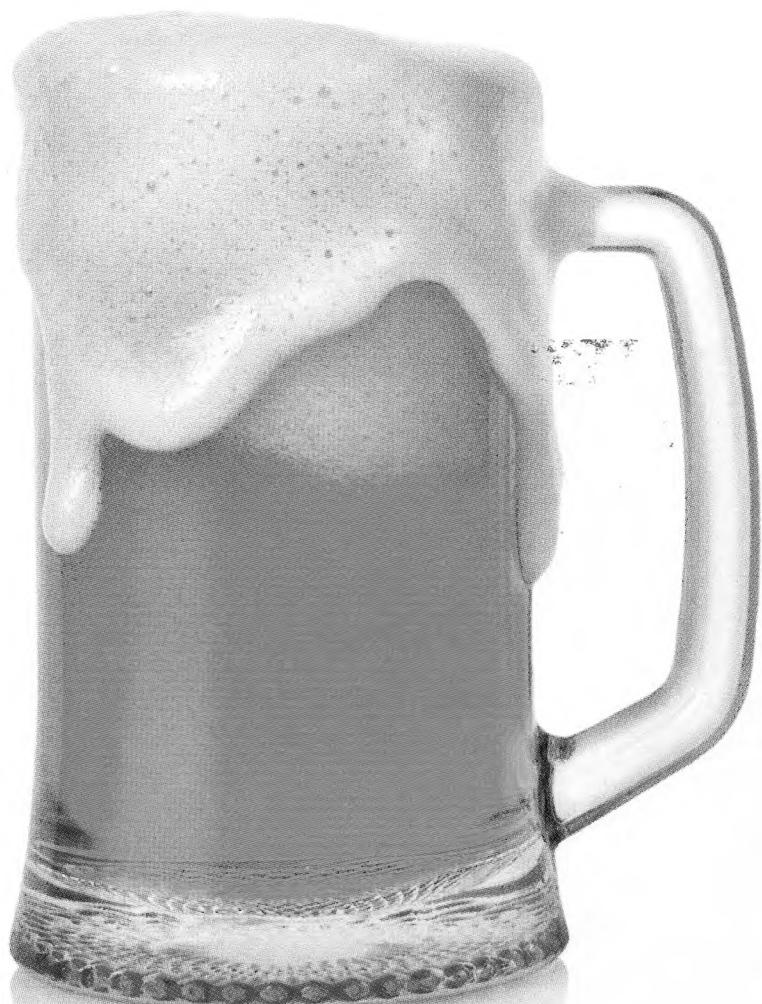
Share Your Photos!

Smithsonian Zoogoer welcomes FONZ members' submissions of photos taken at the Zoo. Please send photos to Zoogoer@si.edu or post to @FONZNationalZoo on Twitter, Instagram, or Facebook. Your photo may be featured on the Zoo View page.

Join the Club! Membership in the FONZ Photo Club is open to photographers of all skill levels. The group meets monthly to hear guest speakers and to share and discuss members' work. Learn more at fonz.org/photoclub.

BEER WON'T SAVE THE WORLD

Unless you drink it with us.

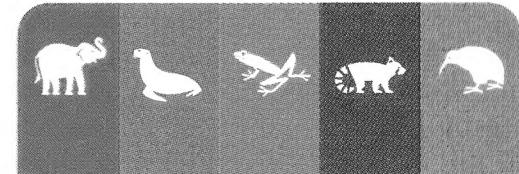


That's right—you can make a difference by drinking beer! Friends of the National Zoo invites you to its annual summertime brewfest, Brew at the Zoo, on July 20. This is FONZ's hoppiest fundraising event, with over 70 breweries, exotic animal encounters, and live music and entertainment, all in the wild setting of the Smithsonian's National Zoo. **Tickets are available to members first on June 8 at fonz.org/brew.** Drink beer. Save Wildlife. *This is a 21+ rain-or-shine event.*

FRIENDS OF THE NATIONAL ZOO

PO Box 37012, MRC 5516, Washington, DC 20013-7012

FOLLOW US: [f](#) [t](#) [g](#) @FONZNationalZoo #WeAreFONZ | fonz.org



THURSDAY, SEPTEMBER 7, 6 TO 9 P.M., SMITHSONIAN'S NATIONAL ZOO

Raise your glass to wildlife conservation at Zoo Uncorked! Join Friends of the National Zoo for an evening of fine wine, exotic animal encounters, live entertainment, and The Art of Conservation—an art exhibition and sale—all in support of the Zoo's mission to save species. **Members receive priority registration and discounted tickets beginning July 27 at FONZ.org/uncorked.**